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A NOURISHING MEAT AND MALT WINE.

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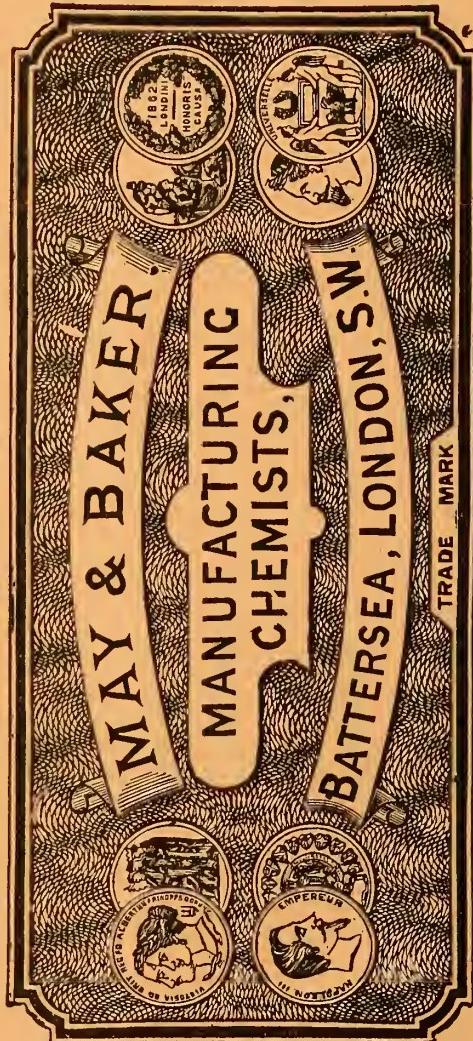
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ECONOMICAL, COMPACT, SOLID, TRANSPARENT.

1 to 12 Inches Square.

A WARNING.

In the High Court of Justice.

CHANCERY DIVISION.

MR. JUSTICE NORTH.

26TH OCTOBER, 1886.

KEATING v. POLL.

IT WAS ORDERED:

That the Defendant be perpetually restrained from stating or causing to be stated that Keating's Persian Insect Destroying Powder contains any substance poisonous to animals or human beings, or from making any statement to the effect that such Powder is dangerous to animals or human beings.

IT WAS FURTHER ORDERED:

That the Defendant, William Sheppard Poll, do pay to the Plaintiffs their costs of this action.

In this action the Plaintiff's Manager swore, and his affidavit was in no way disputed, that KEATING'S INSECT DESTROYING POWDER is quite harmless to animals and human beings, and that it does not contain any substance that is poisonous to either.

"Keating's Powder" is a special preparation, different from, and not to be compared with, any so-called Insect Powders which give so much dissatisfaction to customers.

NOTICE.—Chemists who make statements to customers defamatory of Keating's Insect Powder will be summarily proceeded against.

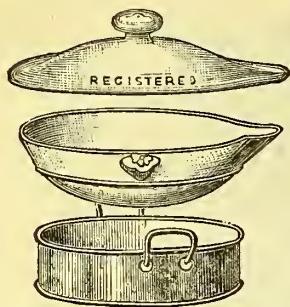
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This Water Bath will supply a long-felt want amongst Chemists and Perfumers, where small quantities of materials have to be dealt with.

The old form of Water Bath necessitates the use of a second vessel for pouring the melted Pomade, Cream, or other substance into the bottles or jars in which they are sold. In the "MAY-ROBERTS" Water Bath the earthenware bowl can be lifted out of the tin containing the boiling water, the process of cooling being thereby very much expedited, and the contents can be poured into the bottles or jars direct from the bowl. The Bath is also supplied with an earthenware cover.

1 PINT.	5 PINT.	10 PINT.
Each 3/0	5/6	9/6

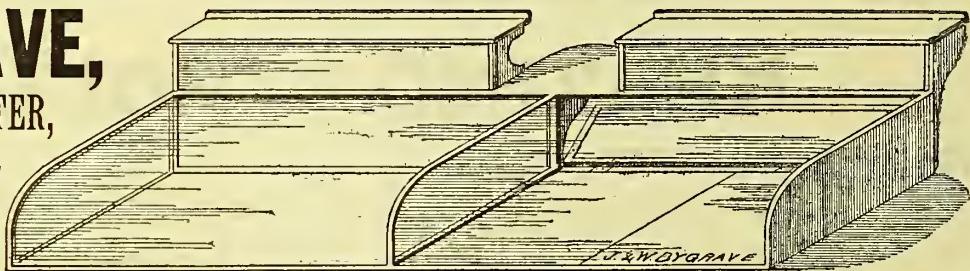


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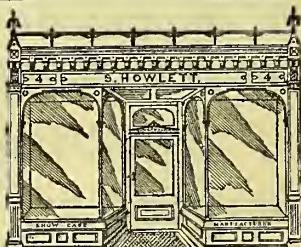
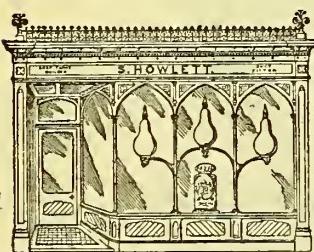
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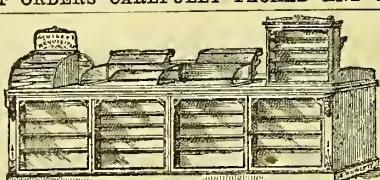
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From Messrs. SYMES & CO., Pharmaceutical Chemists.

We have carefully examined the samples of **Concentrated Liquors**, and have prepared the various Syrups therefrom. The Liquors are of full strength ; the Syrups excellent.

Liverpool.

*Faithfully yours
Symes & Co.
Liverpool.*

From Mr. SAMUEL DEAN, Dispensing Chemist.

For some time past I have used your **Concentrated Liquors for Syrups**.

I have found them a great convenience, and very much more satisfactory than keeping the Syrups in stock, especially as the demand for some of these preparations is very limited.

320 Roman Road, E.

*Yours truly
Samuel Dean.*

From Mr. THOMAS BIFFIN, Dispensing Chemist.

I have used your **Concentrated Liquors** for some time now, and can speak in unqualified praise of them. I feel sure that they give the public satisfaction, as I am frequently told that my *Syr. Ferri Iodid.* is always a good colour, and that very often what is purchased elsewhere cannot be taken by sensitive patients.

Taunton.

*Yours affecly
Thos. Biffin.*

From Messrs. MACKENZIE & CO., Dispensing Chemists.

The **Concentrated Liquors** for making Syrups, which we have had from you, give us entire satisfaction. They are so convenient for retail chemists in dispensing, and so long as they are prepared with the same care and purity they cannot fail to meet the increasing demand for chemical preparations in this form.

Edinburgh.

*Yours truly
Mackenzie & Co.*

From Messrs. W. A. SMITH & CO., Dispensing Chemists.

In reply to your communication, we have much pleasure in stating that we have found your **Concentrated Liquors** admirable in every respect.

Greenwich.

*Faithfully yours
W. Smith & Co.*

From Mr. R. J. MANNING, Pharmaceutical Chemist.

My experience as to the use of your **Concentrated Liquors** is, that they are most useful and convenient, and enable me to supply a much more satisfactory article than before I adopted them.

Wells.

*Yours faithfully
R. Manning.*

From Messrs. GARRETT BROS., Wholesale Druggists.

In reply to your favour, we have great pleasure in adding our testimony to the convenience of your **Concentrated Liquors**, especially in making *Syrup Ferri Iodid.* and *Syrup Ferri Phosph.*, both of which are so very liable to become discolored if kept in the form of Syrup.

Newport, Mon.

*Yours faithfully
Garrett Bros.*

From Mr. A. E. REMINGTON, Dispensing Chemist.

I have had the pleasure of trying your *Liq. Ferri Iodid.*, *Liq. Ferri Phosph.*, *Liq. Eastoni.*, *Liq. Tolut.*, and one or two others, and finding that to once use them creates a want I should like to stock them on the most favourable terms to myself and introduce them to brother druggists. I may say that, on first reading your advertisements, I was sceptical at to the medicinal value of such **Concentrated Liquors**, but am happy to state that, having used them now for over twelve months, I am so convinced of their stability and reliability that I intend to make all my Syrups for the future with your Liquors.

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*Faithfully yours
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1887.

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MANUFACTURERS AND IMPORTERS OF

Perforated, Surgical, and Pharmacopœia Plasters in Rubber Combination; Antiseptic Dressings, Absorbent and Antiseptic Cottons, Hospital Lint and Bandages, Artificial Sponges, and Zonweiss,

23 CEDAR ST., NEW YORK, U.S.A.

During the year 1874 I formed a co-partnership with George J. Seabury, under the name of Seabury & Johnson, for the purpose of manufacturing a line of Pharmaceutical preparations. We remained together until July 18, 1885, when I sold my half interest to him and entered into a covenant by which I agreed not to engage in any business of like character to that in which he was then engaged, for a period of ten years. For a consideration which was mutually satisfactory, this covenant and all other obligations relating thereto were cancelled and annulled. I now beg to state that I have joined the firm of JOHNSON & JOHNSON, who are engaged in manufacturing the same line of preparations as those formerly made and sold by Seabury & Johnson.

Their Manufactory and Laboratory will be entirely under my charge.

Respectfully,

ROBERT W. JOHNSON.

New York, Sept. 23, 1886.

REDUCTION OF PRICES.

On comparison of our prices with those of other manufacturers important reductions will be noticed.

We are enabled to make these concessions in price without in any way impairing the high standard of our goods.

The decline in price of raw materials, together with the greatly increased demand for our goods, reduces cost of manufacture considerably, enabling us to give the dealer the benefit of such reduction.

We also seek to effect a radical reform in the manner of selling, by which one-half the former cost of making sales may be avoided and a corresponding benefit ensured to dealers.

We request our friends, when in want of our preparations, to order from their Wholesale House, or direct from our Agents—Barclay & Sons—thus saving the expense of travellers, as all such expense, where the retail price of an article is fixed, must ultimately be borne by the dealer, in the price he pays for the goods, and we rely upon the trade to co-operate with us in our endeavours to effect a change in this system, as we are satisfied it is a move in the right direction.

PERFORATED PLASTERS.

Pharmacopœia Formulae Combined with Rubber.

PACKED TWO DOZEN IN A BOX.

	Size, 5x7½ inches.	Subject.	Per doz.	£ s. d.
Aconite.....	3 0			
Aconite and Belladonna	4 6			
Arnica	3 0			
Belladonna	4 0			
Belladonna and Capsicum	4 0			
Capsicum	3 0			
Galbanum.....	3 0			
Hemlock	3 0			
Iron	3 0			
Opium	4 6			
Pitch, Burgundy	3 0			
Poor Man's	3 0			
STRENGTHENING.....	2 0			
Warming	3 0			
Quinine.....	4 0			

YARD ROLL PLASTERS.

Pharmacopœia Formulae Combined with Rubber.

PERFORATED OR PLAIN SPREAD

Size, 7 inches wide by 1 yard long.

	Per doz.	£ s. d.
Aconite	1 4 0	
Aconite and Belladonna.....	1 10 0	
Arnica	1 4 0	
Belladonna	1 6 0	
Belladonna and Capsicum	1 6 0	
Blister, Cantharidal.....	1 6 0	
Capsicum	1 4 0	
Galbanum.....	1 4 0	
Iron	1 4 0	
Mercurial	1 10 0	
Opium	1 10 0	
Pitch, Burgundy	1 4 0	
Poor Man's.....	1 4 0	
Strengthening	1 4 0	
Thapsia, French Formula	1 4 0	
Warming	1 4 0	

FIVE YARD ROLL PLASTERS.

Pharmacopœia Formulae in Rubber Combination.

PLAIN OR PERFORATED.**BELLADONNA.**

	5 yard Rolls.	Per roll.	£ s. d.
Belladonna, Perf., 5 in. wide	7 6		
Belladonna, Plain	7 6		
Belladonna, Perf., 7 in. wide	10 0		
Belladonna, Plain	10 0		

CAPSICUM.

	5 yard Rolls.	Per roll.	£ s. d.
Capsicum, Perf., 5 in. wide	6 0		
Capsicum, Plain,	6 0		
Capsicum, Perf., 7 in. wide	8 0		
Capsicum, Plain,	8 0		

STRENGTHENING.

	5 yard Rolls.	Per roll.	£ s. d.
Strengthening, Perf., 5 in. wide	4 6		
Strengthening, Plain,	4 6		
Strengthening, Perf., 7 in. wide	7 0		
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RUBBER ADHESIVE PLASTERS,**ON HOLLOW CYLINDERS.**

A new method of applying adhesive Plasters. These Cylinders are much better adapted for all surgical purposes than the ordinary spool.

	Per Doz.	£ s. d.
½ in. strips, 5 yards long	0 5 0	
1 " " "	0 7 0	
2 " " "	0 13 0	
3 " " "	1 4 0	

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½ in. strips, 5 yards long	0 6 6	
1 " " "	0 8 6	
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7 in. wide, 1 yard roll	0 15 0	

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1 yard Rolls, 7 inches wide	0 10 0	
5 " " "	1 14 0	
5 " 12 inches "	3 0 0	

ON TWILLED LINEN.

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5 " " "	6 0 0	

ON TWILLED COTTON CLOTH.

	Extra Strong.	£ s. d.
1 yard Rolls, 7 inches wide	0 15 0	
5 " " "	4 10 0	

READY CUT ON SPOOLS.

	1 inch strips, 10 yards long	£ s. d.
1 " " "	0 15 0	
2 " " "	1 4 0	
3 " " "	1 12 0	

PERFECT MUSTARD PLASTERS.**SPREAD ON CLOTH OR PAPER.**

	ON CLOTH.	Per Doz.	£ s. d.
10 Leaves in a Flat Tin Box	8 0		
6 " Round Wood Box	5 0		
3 " " "	3 0		
Yard Rolls 6 inches wide, Round Box ..	8 0		
Half Yard Rolls, " "	5 0		

ON PAPER.

	10 Leaves in a Flat Tin Box	£ s. d.
Yard Rolls, 6 inches wide, Round Box ..	6 0	
100 Leaves in Box, 2 in Envelope, per box	4 6	
6 Leaves in Wood Box	per doz. 5 0	
3 " " "	3 0	

SPICE PLASTER.

Yard Rolls, 6 inches wide per doz. 14 0

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PATENT APPLIED FOR.

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A convenient, economical, and water-proof package, in Russia Leather Case, having three flat celluloid tubes, each containing 12 pieces Silk Court Plaster — flesh, white, and black.

Price, per dozen, £1 5s.

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A new waterproof package, made of Celluloid, in assorted colours; compact, neat, and attractive. Each package contains 12 pieces silk, three colours.
Price, per dozen, 6s.

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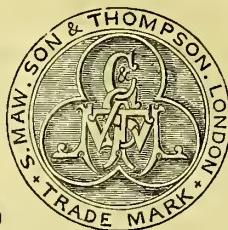
Zonweiss is an entirely new departure in dentifrices. It is composed of new materials and is pure white, of a soft, creamy consistency. It is put up in an extremely neat and novel style of package, and is applied to the brush by means of a small celluloid spoon accompanying each jar.

Zonweiss is believed to be the first and only dental paste or cream that does not decompose or desicate with exposure to the air. It is of such high order of merit as will warrant druggists and dentists adopting it for their personal use.

Per dozen, net, 10s. 10d.

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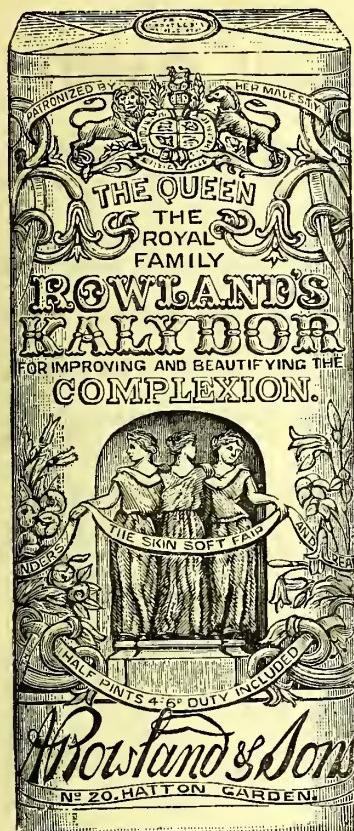
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An emollient milk for beautifying the complexion and eradicating all cutaneous affections, is especially esteemed by ladies in Hot Climates for removing Prickly Heat, Insect Stings, &c.

4/6 and 8/6 per Bottle. Half-size Bottles are now put up at 2/3.

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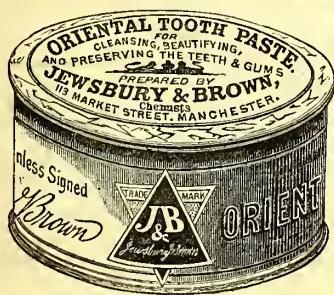
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Is made daily by Chemists retailing rubbishy nostrums, when by a small outlay and applying a little tact genuine preparations of real medicinal worth might be sold, bearing larger profit, giving more gratifying results, and hence an even increasing demand. By "Brooks' Reliable Receipts, etc., etc." will be printed. All preparations in actual commerce are "New Remedy for 'Toothache,'"—Gives instant ease, simple, safe and inexpensive. "Occasional Pills" (for Ladies)—Physician's prescription: "always produce desired result—preferred to Welch's, 'Embrocation' Alb." (like Elliman's)—Milk white, creamy, inseparable, and cheaply produced. "Ringworm Specific."—Guaranteed safe, and certain cure—one trial will prove. "Corn Cure"—Differs from any advertised formula, pays well cleanly, painless, and rapid. "Rheumatic Embrocation"—Kills pain, and reduce inflammation—costs under 8d. per pint. "Red Rose Lotion" (resembles Sulpholine)—For all skin ailments, sunburn, freckles, redness, &c. The above seven sent as sample for 5s. (special offer); detailed List of 380 Recipes post free anywhere. Recipes 1s. 1d. each, 3 for 2s. 6d., free with full instructions.

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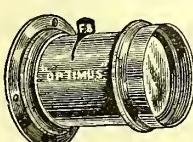
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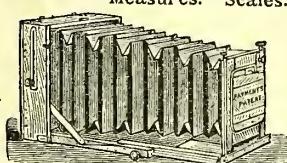
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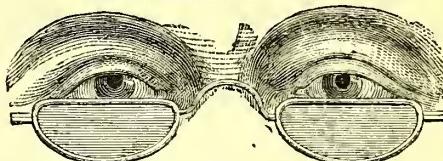
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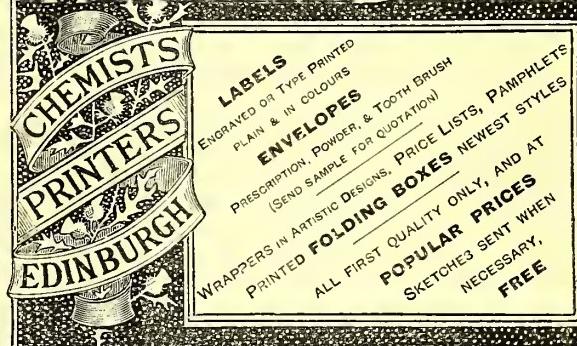
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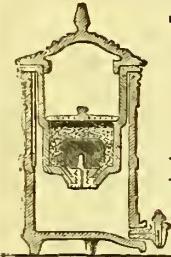
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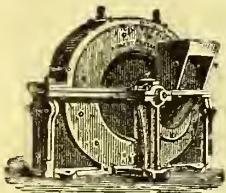
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Obtained the HIGHEST AWARD at the International Health Exhibition, London, 1884.



The high reputation this bottle has achieved is due to the fact of its being in every particular the most perfect yet introduced; and when compared with others in the market it stands pre-eminent. It is most simple in its working parts, therefore the least liable to get out of order; it is the most easily opened, the lightest pressure on the handle being sufficient; it produces a more highly-charged gaseous water than is usually obtained from syphons; it compares most favourably in appearance with any, and the metal top being entirely free from lead, the prejudice against syphon drinks is at once removed, as the liquid passes over pure tin only.

All our Syphons are now fitted at the base with a groove, so that drips from the spout that run down the sides are prevented from soiling the table. See drawing.

NOTE.—Syphons made with our patent foot for collecting excess of liquid dripping from the spout after use are supplied at no extra charge, and will be found of great utility in preventing stains, &c., upon table linen. This is a desideratum long been wanting, particularly for private-house use. Send for sample; forwarded upon receipt of 2s.

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Quart size	£1 2 0	per doz.
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Tops, nickel-plated, from 1s. 6d. per doz. extra. Tops, silver-plated and burnished, from 9s. per doz. extra. A charge is made for packing, except when ordered in our patent bin cases (holding one dozen each, price 2s. 6d. each).

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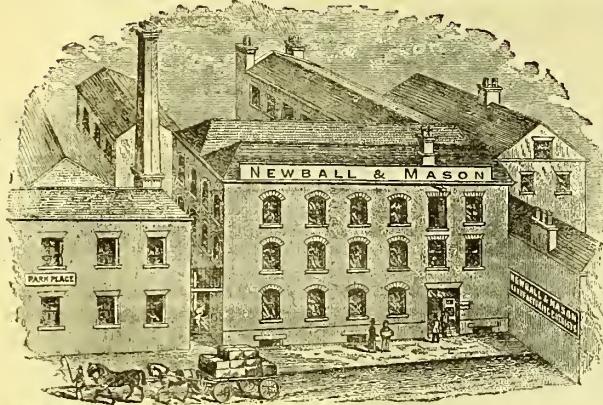
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BEWARE OF ALL IMITATIONS.

MASON'S IS A SPECIAL COMPOUND,
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ALL OTHERS ARE Substitutes.

Sold in Bottles, 6d, 1s, 2s., 5s., and 20s. each.

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FOR THE SPEEDY PRODUCTION OF

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This invaluable preparation is carefully compounded from the above well-known Herbs. Notwithstanding so many imitations got up to resemble the original, it stands unrivalled for the production of a most delicious, wholesome, and non-intoxicating beverage, full of body and flavour, and a rich creamy head like bottled ale.

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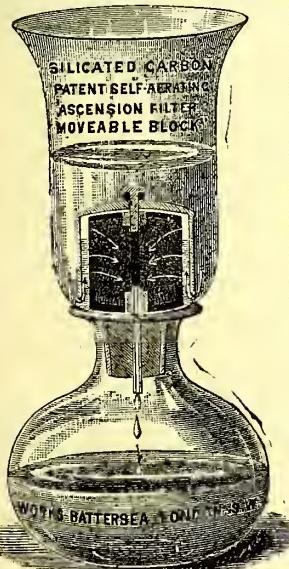


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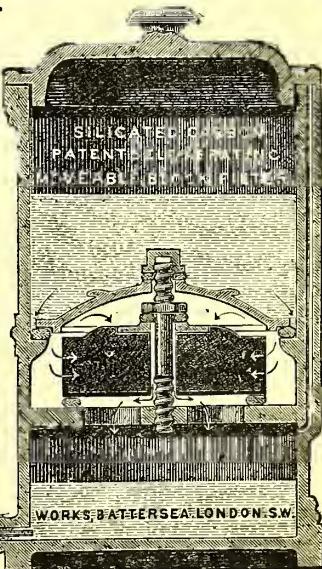
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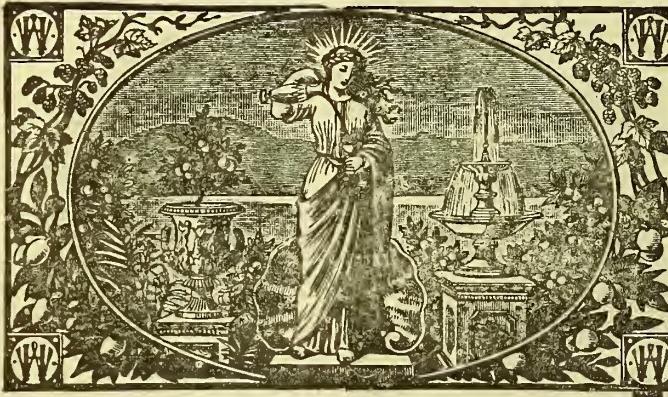
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"An excellent and most agreeable beverage."

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"It pours out with as fine a 'head' as any glass of ale, and possesses all the fine aromatic flavour of the pure ginger."

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This Essence, which is a complete Bouquet of Flavours in a highly concentrated state, makes a Ginger Ale possessing an amount of aroma, flavour and quality that will be sure to command a large sale, and that is unsurpassed by the so-called finest Belfast Ginger Ale. Trade Price, 9s. per lb.; 12 lbs. and upwards, 8s. 6d. Quantity required, half a fluid oz. to each gallon of Syrup, making 106 10-oz. Bottles. This Essence will be found most valuable to the general trade.

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This Essence is made from the Choicest Hops grown, and is unrivalled for its peculiarly fine Hop flavour and aroma. Hop Ale made from this Essence has the full flavour of the finest Hops, and is a really appetising Bitter Beer. Trade price, 8s. 6d. per lb.; 12 lbs. and upwards, 8s. Quantity required, two fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

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AND INDEX TO ADVERTISEMENTS.TELEGRAPHIC ADDRESS—
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LONDON.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

**NOTE.—The Folios shown in this Index are those at the FOOT of the Page, and NOT at the Top.
This arrangement is necessary in order to meet the requirements of the Post Office.**

A1 BRAND MENTHOL CONES	Menthol in Variety	35	FELTON, GRIMWADE & CO. Druggists, Melbourne	21	NATALI, E. Show Case Maker	4	
ALLEN & HANBURYS	Manufacturing Pharmacists and Export Druggists	COVER	FITCH & NOTTINGHAM	Leeches	NATIONAL CHEMICAL CO., Chloride of Lime	35	
APOLLINARIS CO.	Apollinaris 23 Hunyadi Janos 35 Water, Friedreich's Water, Text	746	FLETCHER, FLETCHER & STEVENSON	Concentrated Liquors, Opinion of Pharmacists	NEWBALL & MASON ... Non-Intoxicating Beer	14	
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BIRLEY, DR.	Agents Wanted Coloured Supplement		HAWKINS, W. Hop Ale Essence	15	ROBINSON, B. Corn and Wart Paint	35	
BINGHAMTON OIL REFINING CO.	(E. A. de Pass) 34		HAYWOOD, J. H. Surgical Appliances	25	ROCKE, TOMPSITT & CO. Druggists, Melbourne	23	
BLYTON, T. BAGE & CO.	Medicated Lozenges, Chrysodine	30	HEARN, E. A. & CO.	Watch Smelling Salt Bottle	ROWLAND, A. & SONS Kaylor, Macassar Oil, &c.	9	
BOWERS BROS.	Chlorophyl, Tincture, &c.	10	HERTZ & COLLING WOOD	Jensen's Cod Liver Oil	RUMFORD CHEMICAL WORKS Horsford's Acid Phosphates	27	
BRITIS I. & COLONIAL AGENCY	Coloured Sup.		HOLLOWAY, PROF.	Pills	SAINSBURY, S. Lavender Water	33	
BROMLEY & CO.	Bromo Iodine Mineral Waters		HOP BITTERS CO., THE	30	SANGER & SONS Bathing Cap, &c., Price Current	31	
BROOKE, BOND & CO.	Tens	12	HOOPER & CO. Carnaby, Registered	COVER	SANITAS, THE, CO. (LIM.) Disinfectant		
BROOKS, PEELE & CO.	Metal Sprinkler	20	HORN & SON	Marking Ink	TEXT 746		
BROOKS, T.	Formulae	10	HOWLETT, T. S.	Patent Agents	SAUNDERS, J. W. Private Tu or	38	
BURGESS, E.	Lion Ointment and Pills	28	HYUNYADI JANOS	Shop Fitter	SAVORY & MOORE Peptonised Cocoa & Milk	12	
BURROUGH, J.	Spirits of Wine	36	INGRAM & ROYLE	Karlsbad Sprudl Salt, COVER	SEABURY & JOHNSON Spread Plasters	41	
BURROUGHS, WELLCOME & CO.	Alimentary Troubles, Kepler Solution	21, 22	INTERNATIONAL PATENTS ASSOCIATION	De Muel's Health Biscuits	SEDDON, J. & T. Gelatinous Oil	33	
BUSINESSES FOR DISPOSAL	Coloured Sup.		ISAACS & CO.	13	SHARND ND & CO. Wholesale Druggists	21	
BYGRAVE, J. & W.	Shop Fitters	4	JEWSBURY & BROWN	Oriental Tooth Paste	SHIRLEY, J. W. Menthol Cones, &c.	33	
CADBURY BROS.	Cocoon Essence, COVER		JOHNSON & JOHNSON	Catalogue and Price List 6, Plaster, &c.	SILVERLOCK, IL. Counter Bills and Labels	11	
CARTER, J. HARRISON	Dissolvent		JONES, DR. G. H.	Surgeon Dentist	SLACK & BROWNLOW Filters	15	
CHRISTY, T. & CO.	Myocom	39	KEATING, THOMAS	"A Warning"	SOUTHALL BROS. & BARCLAY Ureometer	29	
CHURCHILL, J. & A.	Organic Materia Medica	10	KEMPTHORNE, PROSSER & CO.	Concurred Macns	SOUTH LONDON SCHOOL OF PHARMACY	10	
COCKING & CO.	Menthols, Peppermint, &c.	26	KERNICK & SON	Druggists in New Zealand	SPIRONE, THE CO. (LIM.) Inhalant Spirone	39	
CONDY & MITCHELL	Condyl's Fluid	1 TEXT 746	KILNERS BROS.	Wholesale Druggists	STEPHENSON & TRAVIS Surgical Dressing	33	
CROUCH, F. B.	Damiana Waters	27	KINROSS & BLACK	Printing	STONE & SON Muricidine	33	
DENNIS, J. W.	Pig Powders and Corro'ins	39	LENNON, B. G., & CO.	Wholesale Druggists	SUMNER, R., & CO. Wholesale & Export Druggists, COVER		
DE PASS, A. E. & CO.	Petrolina	34	LEVERMORE, AUG., & CO.	Pure Precipitated Chalk	SWIFT SPECIFIC CO., THE	Vegetable Blood Purifier	22
DEPOUZIER, HENRI	Drugs, Herbs, Oils, &c.	27	LEWIS, H. K.	Extra Pharmacopoeia	TAUNUS SPRING NATURAL MINERAL WATER CO. (LIM.)		
DE ST. DALMAS, A.	The "Leicester" Adhesive		LONDON HOMEOPATHIC HOSPITAL	14			
DOULTON & CO.	Plaster	10	LONGMANS, GREEN & CO.	Text Book of Organic Materia Medica	TAYLOR, T. & F. J. Aerated Waters	34	
DURRANT, GEORGE	Filters	12	LOWE, C.	Liver Mixture	THE ECLIPSE PATENT CHECK FILM CO.	40	
EDGEELL BROS.	Rectified Pure Spirit	38	LYNCH, J. CO. Symes' Thibet Mu. &c., COVER	33	TOOGOOD, W. Earthenware Coated Pots	33	
EDINBURGH CLASSES	Saline	10	MACAFARLAN, J. F., & CO.	Chloriform, &c.	TYPER & KING Pure Acids, Hypophosphites, &c.	33	
EDWARDS, W. & SONS.	Patent Medicines	40	MACNAULIAN, J. D. & CO.	Shellac, Gums	TYRER, P. Boro' Ketchup	13	
ELLIMAN, SONS, & CO.	Embrocation	TEXT 746	MAGNAUGLIAN, F. J.	Agen y	VACCINE ASSOCIATION Pure Lymph	26	
ESCHMANN BROS. & WALSH	Flexible Catheter	38	MAW, S. SON & THOMPSON	Quar'ly Price Current	WARRICK BROS. Essential Oi's	9	
EVANS, SONS & CO.	Saline	13	MAY & BAKER	Sublimed Tablet Camphor, COVER	WEST, THOMAS Okell's Mono Louquet	26	
EVANS, LESCHE & WEBB	Savory Capsules and Cigarettes, Tooth Paste	23	MAY, ROBERTS & CO.	Water Bath	WHITARE & GROSSMITH Tran'parent Soap	34	
EVANS, SONS & MASON (LIM.)		13, 21	MISCELLANEOUS ADVERTISEMENTS	Coloured Supplement	WILLIAMS, J. P., & BROS. Medicinal Products, &c.	23	
EXCHANGE COLUMN	Coloured Supplement		MORPHY, E.	Walnut Pomace	WINKELMAN, J. H., & CO. Liquid Glue (Procter's)	36	

CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

AERATED AND MINERAL WTS

DITTO PLANT

[See SYPHONS and ESSENCES.]

Esculap
Apollinaris (Hunyadi, Friedrichshall, and Apollinaris)
Barnett and Foster
Bromley and Co. (Woodhead Spa.)
Carter, J. H., & Co. (Ginger Ale Essence)
Chemists' Aerated Waters Association
Durrant, Geo. & Co.
Ellie (Ruthin)
Hassall and Co. (Citric Acid, Phospho)
Hay, W. (Hop Ale Essence)
Hunyadi Janos
Ingram and Royle (Mineral and Vichy, Bauerbrunnens, Carlsbad, Jowbury and Brown, Kinsale, and Co., Meadowcroft, W. Mills and Co. (Bourr'e), Taunus Spring Natural Mineral Co.)
Taylor, T. and F. J. Williamson, W.H. (WntrDrnk.) [See GINGER ALE.]

AGENCIES

ABROAD

Cocking (Japan)
Drysdale, J. W., and Co. (Philadelphia)
Eisner and Mendelson (Philadelphia)
Evans, Sons and Mason (Canada)
Felton (Melbourne)
Fougera (New York)
Hormelje Rutledge (Bmby)
Kynoch (N.W. Zealand)
MacNaughtan (New York)
Prosser, E., and Co. (Edinb)
Roberts (Paris, &c.)
Rocke (Melbourne)
Sharland & Co. (Auckland N.Z.)
Stallman and Fulton
Symes and Co. ("Sim's")
Williams, J. P., and Bros.

Perkin, Son and Rayment (Scientific)

Rothermel, Paul (Vinegar)

Wolters, Otto (Balances)

BATH GLOVES

G. Pattinson

Sherlock Bros.

BLACKING

New Military Blacking Company

Jameson and Co.

BOTANIC BEER

Newball and Mason

BOTTLE CAPS

Hunt, W. F., and Co.

BOTTLES

Aire and Calder Bottle Co.

Barrett, R. H.

Barnett and Foster

Brathy and Hincliffe

Bretill's (Lim.)

Brooks, Peel (Perfumers)

Glasgow v Apothecaries' Co.

Hearn, E. A., and Co.

Isacs and Co.

Kilner Bros.

Lang, Jonas and Jules

Litch and Co. ("L" Brand)

Mason, R., and Co.

Potts

Thompson, Millard and Co.

(Feeding)

Toogood

BISMUTH PREP.

Hewlett and Sons

Howards and Sons

May and Baker

Sellers, J.

BOOKS

Baily, J.

Lewis, H. K.

Southall Bros. & Barclay

APPARATUS

Bracher & Co. (Automatic distilling)

Mand, W. R.

May, Roberts (Water-bath)

Orme (Scientific)

BOXES	Austin and Co. (Cardboard) Ayrton and Saunders (Willow)
BROMIDIA	Irvine and Seller Metz (Pine and Willow)
BRUSHES	Robinson and Sons (Pill and Insect Powder)
BUTTER COLOUR, &c.	Battle and Co. Dukas and Co. Goodall, H. A., and Co. ("Stand's") Sherock Bros.
CAMPHOR	Howards and Sons Keene and Ashwell (Homoeopathic) May and Baker Murray, Sir James (Fluid)
CAPSULES	Betts and Co. (Metallico) Denoual, J. (Medicinal) Duncan, Flockhart and Co. (Cascara Sagrada) Hooper, B., and Co. Maw, Son and Thompson Metz ("Acme" Brand)
CARMINE	Bush, W. J., and Co. Sellers
CASTOR OIL	Allen and Hanburys
CATALOGUE	Evans, Sons and Co. (Price Current) Maw, S., Son and Thompson (Price Current) Johnson and Johnson Newbery and Sons
CEMENT	Foulkes Kay (Coaguline) Winkemann and Co. (Liquid Glue)
CHALK PRECIP.	Dunn and Co. Levermore, Aug. and Co.
CHEMICALS	Bernstein Vogt (Fine) Bramwell, E., and Son Bush, W., and Co. Dunn and Co. Fletcher, Fletcher & Stevenson Gaskell, Deacon and Co. (Bicarbonate of Soda) Howard and Sons (Pharmaceutical) Lindley, C. R., and Co. May and Baker Morris, Collard, and Co. Petri Bros. Summer, R., and Co. Smith, T. and H. Tyke and King Walker, Troke and Co. Wink, J. A., and Co. (Fine) Zimmermann, A. and M.
CHLORATE OF POTASH	(Compressed Tablets) Burroughs, Wellcome and Co. Leo's Hooper, B., and Co.
CHLORODYNE	Blyton-Bage and Co. (Twin-low's) Davennart (Brown's) Towle, A. P.
CHLOROFORM, &c.	Duncan, Flockhart Macfarlan, J. F. Petri Bros. Smith, T. and H. Wink, J. A., and Co. Zimmermann
CITRIC ACID	Hassall (Phospho)
COCAINE	
HYDROCHLOR.	Howards and Sons
COCOA & CHOCOLATE	Cadbury Fry (Malted) Savory and Moore (Cocos and Milk)
COD-LIVER OIL	Allen and Hanburys Burroughs, Wellcome Burgoyne (Pepeteine) Harrington & Collingwood London Old Liver Oil Co. Smith, T. J. Southall Bros. and Barclay Woolley, Sons and Co.
COFFEE	Symington and Co. (Coffee Essence)
COIN TILLS	Sherwin (Chequer) The Eclipse Patent Check Till Co.
COLLAPSIBLE TUBES	Bruce, H., Peel and Co.
COMBS	Goodall, H. A., and Co. Sherlock Bros.
COMPRESSED MEDICINES	Allen and Hanbury's Burroughs, Wellcome and Co. Hooper, B., and Co. Leo's Tablets Newbery and Sons
CORN CURES	Robinson, B. Yonge's
COTTON WOOL	Haynes G., and Co. Robinson and Sons (Absorbent) Sanger, J., and Sons
DENTIFRICES	Jewsbury and Brown Newber and Sons Sutton, O., and Co. Thompson and Capper Woods, W. (Areca Nut)
DENTISTRY	Jones, Dr. C. H. (Mechanical)
DISINFECTANTS	Condy and Mitchell Government Sanitary Co. Hamilton and Co. National Chemical Co. Sanitary Co. Stale & Co. (Chloride of Lime) The American and Continental Sanitary Co. (Lim.)
DOG MEDICINES	Spratt (Patent)
DRUGGISTS' SUN.	Ayrton and Saunders Barclay and Sons Bourne, Johnson and Latimer (Hawley's Counter Adjuncts) Evans, Sons (Savars) Lynch and Co. Marriott and Co. ("Lily" Baby Comforter) Maud, W. R. Maw, S., Son and Thompson Newberry, J., and Sons Pattison, Geo. Savers and Sons Schutze and Co. Sherlock Bros. Thompson, Millard Toogood
DRUMS, CANS, &c.	Noakes and Co.
DUBBIN	Dales, J. T. Jameson and Co. New Military Blacking Co.
DYES	Ayrton and Saunders
EAU DE COLOGNE	Farina, J. M. (Gegenreiter) Mason, H. C. (Nun)
EFFERVESCENT SALINE	Allen and Hanbury's
ELECTRIC APPAR.	Darton, F., and Co. Orme and Co. Colthurst and Harding (Electric Light Oil)
EMERGATION	Elliman, Sons and Co.
ENEMAS	Ingram and Son Lynch and Co. Sanger and Son
ENGRAVERS	Barker, W., and Son
ESSENCES, FRUIT AND SOLUBLE	Brathy and Hincliffe Burgoyne, Buridges and Co. Bush, W. J., and Co. Carter, H. W., and Co. Hay's Soluble Lemon, &c. May and Baker Meadowcroft, W. Stevenson and Howell Tyke and King Vogt, G. Woolley, Sons and Co.
ESSENTIAL OILS	Bernstein and Vogt Bush, W. J. (Lemons, &c.) Cocking (Japan Peppermt) Hay, W. Lambert, S. and Co. May and Baker Meadowcroft, W. Rake, Tomitt (Eucalyptus) Summer, R. Stallman and Fulton Stevenson and Howell Symes (Or. Lavender) Vogt, G. Warrick Brothers
HERBALISTS	Butler, McCulloch and Co. Deporter, Henri Gordon (Extract of Herbs) Newhall & Mason (Extracts of Herbs) Peek and Velson Potter and Clarke
HOMEOPATHIC	Gould, E. and Son Jenner, G. (German) Keene and Ashwell Leath and Radcliffe Thompson and Capper
HOP ALE	Hay, W.
HOSPITALS	Wright, Layman and Umney
HYPOPHOSPHITES	Dunn and Co. Flockhart and Co. (Chloric) Howard and Son May and Baker Robbins
INHALERS	Burroughs, Wellcome and Co. Evans, Sons and Co. Maw, S., Son and Thompson Spiron, The Co., Lim. Toogood, W.
INK [See MAKING.]	Antoine Bewley and Draper Duncan, Flockhart
INSECTICIDES	Burroughs, Wellcome and Co. Sandford Steiner and Co. Smythe, K., and Co. Vogt, G. (Dalmatian)
KETCHUP	Tyler, P.
LANOLINE	Ewen, J.
LARD	Fitzgerald and Nottingham Potted and Clarke
LEECHES	Evans, Sons and Co. (Speciality) Montserrat (see Evans)
LICORICE	Maud (Compound)
LIMB JUICE	Feitoff and Sons (Speciality) Monterrat (see Evans)
LINSEED	Kemp, W., and Sons (Crushed) Mumford
LINT	Liverpool Lint Co. Maw, Son and Co. (Taylor's) Newsome (Surgeon's) Robinson and Sons Seabury and Johnson Westhorp's (Marine)
LOOFAHS.	May, Roberts and Co. Maw, S., Son and Thompson
LOZENGES	Allen and Hanburys Blyton, Baye & Co. (Medicated) Craven, M. A., and Son Gibson, R. (Manufacturer) Lynch and Co. Martindale, W. (Nitro-Glycerine Tablets) Mason, Geo., and Co. (Meat) Warrick Brothers
FORMULAE	Brooks, T.
FULLER'S BARTH	Chubb, J., and Co.
GINGER ALE	Ginger Ale (see Chubb)
DYED	Harston and Co. Hay, W. Meadowcroft, W. (Essence of Mills, R. M. Summer, R., and Co. (Essence)
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DYES	Harston and Co. Hay, W. Meadowcroft, W. (Essence of Mills, R. M. Summer, R., and Co. (Essence)
FORMULAE	Allen and Hanbury's Farina, J. M. (Gegenreiter) Mason, H. C. (Nun)
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FULLER'S BARTH	Chubb, J., and Co.

PENS	Gillott	PITCH	Peace, J. R., and Co.	SEALING WAX	Waterston and Sons	STARCH	Critchley (Gloss)	VALUERS	420
PEPSINE, &c.	Burroughs, Wellcome Fletcher, Fletcher and Steven- son	PLASTERS	Johnson & Johnson Mather, W.	SEA SALT	Warren, A. and J. (Stoddart's)	STROPHANTHUS	Burroughs Wellcome and Co.	TRANSR. AGENTS	
Green, C., and Co.	Keens and Ashwell	St. Dalmas, A. De Seabury and Johnson	Smith, W. F.	SEIDLITZ PWDRS.	Chubb, J., and Co.	SUGAR	Gibson, R.	Foster, F.	
Newberry (Ingluvin)	Swan and Moore (Peptonised Milk)	PODOPHYLLIN, &c.	Keith, B. and Co.	SELTZOGENES	Durant	SURGICAL	Cocking, J. T. (Splints, &c.)	Orridge and Co.	
Warner and Co. (Ingluvin)	Zimmermann	Knight, T. and H.	Smith, A. and Co.	SHEEP DIP	May, Roberts and Co.	COCKING	Ingram and Son	British and Colonial Agency	
PEROX. OF HYDR.	Dunn and Co.	POLISHING	Baumgartner (La Brillantine)	SHAVING	Hovenden (Euxesis)	Marks, A. A. Artificial Limbs	Keating, Thomas	VERMIN KILLERS	
Robbins	Bradley, Bourdas (Albatum)	Bradley, Bourdas (Albatum)	Cardigan Reviver	Lloyd, A. S. (Euxesis)	Elvin Bros.	Maw, Son and Thompson	Sanford and Son	" Rat Catchers' " Poison	
PHARM. PREPS.	Allen and Hanburys	Jamieson and Co.	New Military Blacking Co.,	SHOP FITTERS	Grindley and Co.	Potter and Barstow (Elastic Gum)	Steiner and Co.	Battle, J. R.	
Barron, Squire and Co.	Battle and Co. (Bromidia)	Lim, (Metal)	Oakey, John, and Sons	SHEEP DIP	Bygrave, J. and W.	Schutze and Co.	Stone and Son	Keating, Thomas	
Blyton, Baze, and Co.	Burgess, Willows, Francis	Lynch, (Metal)	Printers, (C.C. Pots, regist.)	SOAP (SOFT, &c.)	Howlett, S.	Stephenson and Travis		Lang, J. and J.	
Burgoyne, Burbridges	Burroughs, Wellcome (Various)	Lynch and Co.	PRINTING	CHISWICK SOAP CO.	Lynch and Co.	Thompson, Millard and Co.		Woolley, Sons, and Co.	
Duncan, F. W. Kharat	Duncan, F. W. Kharat	Maw, S. Son and Thompson	PRINTING	CHISWICK SOAP CO.	Maw, Son and Thompson	Woolley, Sons, and Co.			
Evans, Sons and Co.	Fellows (Lycopophites)	Pothas, H., and Co.	PYROGALLIC ACID.	CHISWICK SOAP CO.	Natal, E. (Show Cases)				
Fletcher (Liquor for Syrups)	Fletcher (Liquor for Syrups)	Toogood (C.C. Pots, regist.)	Bernstein & Vogt	CHISWICK SOAP CO.	Stefan, T., and Co.				
Hearst, Squire and Francis	Hearst, Squire and Francis	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)	Yates, W. S.				
Hewitt and Sons	Hirst, Brooke and Hirst	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Hooper, B., and Co.	Hooper, B., and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Howards and Sons	Howards and Sons	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Kay Bros.	Keith (Cone, Tinctures)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Martindale (Nitroglycerine)	Martindale (Nitroglycerine)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Sellers, J.	Sellers, J.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Sonthall Bros.	Sunner, R., & Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Symes and Co.	Walker, Troke	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Wink, J. A., and Co.	Woolley, Sons	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Wyles (Various)	Wyles (Various)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
PHOTOGRAPHIC	PHOTOGRAPHIC	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
May and Baker	May and Baker	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Perken, Son and Rayment	Perken, Son and Rayment	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
PILL MACHINES	PILL MACHINES	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
McFerran, J. A.	Pindar, J. W.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Robertson, J., and Co. (Coating)	Robertson, J., and Co. (Coating)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
PILLS (Coated, &c.)	PILLS (Coated, &c.)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Allen and Hanburys (Schief- teils)	Allen and Hanburys (Schief- teils)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Buchanan, Thomas	Buchanan, Dr.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
McKesson and Robbins Ovoid- capsuled	McKesson and Robbins Ovoid- capsuled	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Morrison	Morrison	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Newberry	Newberry	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Sanger, J., and Sons	Sanger, J., and Sons	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Smith, W. F.	Towle (for Females)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Towle (for Females)	Warner, W. R. (Coated)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Wyles and Co.	Wyles and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SALICINE	SALICINE	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Macfarlan and Co.	Macfarlan and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Smith, T. and II., and Co.	Smith, T. and II., and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SAUCES, PICKLES	SAUCES, PICKLES	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Lazenby (Harvey's)	Lazenby (Harvey's)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Tyler, P.	Tyler, P.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SCHOOLS OF PHARMACY, &c.	SCHOOLS OF PHARMACY, &c.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Edinburgh Classes	Edinburgh Classes	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Liverpool School	Liverpool School	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
London Homoeopathic	London Homoeopathic	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Manchester College	Manchester College	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
The School of Pharmacy	The School of Pharmacy	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Tully, J.	Tully, J.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Westminster College	Westminster College	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SALT	SALT	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
BERGER'S (Essence of)	BERGER'S (Essence of)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
RENNET	RENNET	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Benger's (Essence of)	Benger's (Essence of)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SALICIN	SALICIN	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Edgell, Bros. (Pure)	Edgell, Bros. (Pure)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Goodall, H. A., and Co.	Goodall, H. A., and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Perken, Son and Rayment	Perken, Son and Rayment	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SPIRIT	SPIRIT	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Burroughs (Pure & Methyl.)	Burroughs (Pure & Methyl.)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Edgell, Bros. (Pure)	Edgell, Bros. (Pure)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Gibbs, Smith and Co.	Gibbs, Smith and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Harvey, J. W., and Co.	Harvey, J. W., and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Jones and Mason (Methyl.)	Jones and Mason (Methyl.)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Macnair, J. & J.	Macnair, J. & J.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Warren, A. & J.	Warren, A. & J.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SPOON	SPOON	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Cresswell Bros.	Cresswell, R., and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Cresswell, R., and Co.	Cresswell, R., and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Evans, Sons and Co.	Evans, Sons and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Maw, Son and Thompson	Maw, Son and Thompson	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
(Sponge Bags)	(Sponge Bags)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Peterson, M.	Peterson, M.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Schutze and Co.	Schutze and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Sherlock Bros. (Sponge Bags)	Sherlock Bros. (Sponge Bags)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
STAMPS	STAMPS	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Lindner, M.	Lindner, M.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Pollard, A. W.	Pollard, A. W.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
STOPPERS	STOPPERS	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Austin and Co. (Sprinklers)	Austin and Co. (Sprinklers)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Barnett & Foster (The Eclipse)	Barnett & Foster (The Eclipse)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Brooks, Peel (Sprinklers)	Brooks, Peel (Sprinklers)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Lazenby, E., and Son (Barrett's Patent)	Lazenby, E., and Son (Barrett's Patent)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
STOVES	STOVES	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Clarke, S., & Co. (Gas Heating)	Clarke, S., & Co. (Gas Heating)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SUGAR	SUGAR	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Gibson, R.	Gibson, R.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SURGICAL	SURGICAL	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Cocking, J. T. (Splints, &c.)	Cocking, J. T. (Splints, &c.)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Ingram and Son	Ingram and Son	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Marks, A. A. Artificial Limbs	Marks, A. A. Artificial Limbs	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Maw, Son and Thompson	Maw, Son and Thompson	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Potter and Barstow (Elastic Gum)	Potter and Barstow (Elastic Gum)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Schutze and Co.	Schutze and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Stephenson and Travis	Stephenson and Travis	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Thompson, Millard and Co.	Thompson, Millard and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Woolley, Sons, and Co.	Woolley, Sons, and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Yates, W. S.	Yates, W. S.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SYPHONS	SYPHONS	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Barnett and Foster	Barnett and Foster	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
British Syphon Co.	British Syphon Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Dufort	Dufort	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Lang, J. and J.	Lang, J. and J.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
SYRUPS	SYRUPS	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Fletcher, Fletcher (Liquors)	Fletcher, Fletcher (Liquors)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
TEA	TEA	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Brooks, Bond and Co.	Brooks, Bond and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Pearse and Wheatley	Pearse and Wheatley	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Spinner and Co.	Spinner and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Walker and Dairymple	Walker and Dairymple	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
THERMOMETERS	THERMOMETERS	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Darton, F., and Co.	Darton, F., and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Edgell, Bros. (Pure)	Edgell, Bros. (Pure)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Goodall, H. A., and Co.	Goodall, H. A., and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Perken, Son and Rayment	Perken, Son and Rayment	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Schutze, F., & Co.	Schutze, F., & Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
TIN CANISTERS	TIN CANISTERS	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Noakes, B., and Co.	Noakes, B., and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
TIN FOIL	TIN FOIL	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Betta and Co.	Betta and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
TINCTURE PRESS.	TINCTURE PRESS.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Pinder, J. W.	Pinder, J. W.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Horn and Son	Horn and Son	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Trade Mark Protection Assn	Trade Mark Protection Assn	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
TRUSSES	TRUSSES	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Bailey, W. H., and Son	Bailey, W. H., and Son	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Colwell, H. M.	Colwell, H. M.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Evans, J. H.	Evans, J. H.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Lynch and Co.	Lynch and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Schutze and Co.	Schutze and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
URETHANE	URETHANE	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Howard, Sons and Co.	Howard, Sons and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Hearst, Squire and Franc's	Hearst, Squire and Franc's	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Hirst, Brooke and Hirst	Hirst, Brooke and Hirst	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Pearson, C. F., and (Foreign)	Pearson, C. F., and (Foreign)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Potter and Clarke (American ac.	Potter and Clarke (American ac.)	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Southall Bros. and Barclay	Southall Bros. and Barclay	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Summer, R., and Co.	Summer, R., and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Thompson, Millard and Co.	Thompson, Millard and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Walker, Troke and Co.	Walker, Troke and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					
Woolley, Jas., Sons and Co.	Woolley, Jas., Sons and Co.	PRINTING	CHISWICK SOAP CO.	SOAP (SOFT, &c.)					

ESTABLISHED 1810.

H. BROOKS, PEEL & CO., COLLAPSIBLE TUBE MANUFACTURERS

PATENTEES AND SOLE MANUFACTURERS OF THE

PORTABLE METAL SPRINKLER STOPPER,

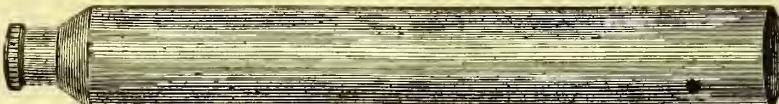
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GLASS BOTTLES FOR PERFUMERS AND OTHERS.

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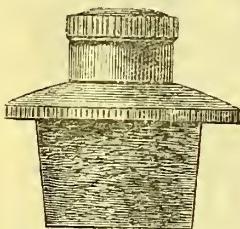
COLLAPSIBLE TUBES OF ALL SIZES.



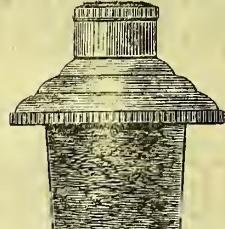
For Perfumes, Artists' Colours, Soaps, Cosmetiques, Creams, Oils, Varnishes, &c. These Tubes are inexpensive and portable, and may be applied to many useful purposes besides those above mentioned.

SOLE MANUFACTURERS AND PATENTEES OF

THE PORTABLE METAL SPRINKLER STOPPER,



With Cork fitted thereon for bottles of any size, and having apertures of various dimensions, especially adapted for Perfumes, Hair Washes, Lime and Glycerine Essences, &c. These handsome stoppers give a character and finish to the most ordinary bottles to which they may be applied. Gilt or plain; and put up if required in handsome glass lid boxes, suitable for shop counters and show cases, at moderate prices.



THE "TORSION" PATENT SPRINKLER.

The two designs, Nos. 18a and 19a, are those to which we direct special attention, as sizes being in general use; other sizes will follow promptly to meet all requirements, on which Caps with two or more holes will be introduced to meet the public taste.

Particular attention is called to the latest improvement in our Patent Metallic Stopper, the "Torsion."

This New Stopper adheres to the design of the original patent, which has been universally acknowledged as an ornamental and inexpensive article for the Toilette, as possessing all the advantages of a "Permanent and Indestructible Stopper, suitable

No. 19a.

for Bottles of all Sizes and Shapes," with the additional security it affords, that the Cap can never be entirely unscrewed consequently it cannot be lost. It is specially effective as a Sprinkler, while giving a more prompt and copious, yet economic, supply, through the improved action of the Cap. Such combined advantages, in an article of exquisite finish, have long been desired, and it is thus submitted for general approval, and its usefulness when tried will be appreciated by all.

Illustrations, Price Lists, &c., can be had on application, or through any Wholesale House in town or country. All Orders received direct will be promptly attended to.

CAUTION.—All Stoppers of our Manufacture are made of Pure Tin, and have the name of H. BROOKS & CO. stamped on the under side of the rim.

All Tubes are made of Pure Tin unless specially ordered of Mixed Metal, from the sma' est size up to 18 in. by 23.

RANDOM POINTS ON ALIMENTARY TROUBLES.

THE IMPORTANCE OF Hydrochloric Acid, Milk, and PEPTONISED FOODS.

Before Leube, the course of inquiry into diseases of the stomach was restricted to percussion, palpation, interrogations, and examining the vomit and ejecta. Some few years ago the plan of washing out the stomach was advocated strongly by many, and the results recorded were very good in some instances, especially gastric dilatation. This led to another step, which is the examination of the gastric juice to ascertain its acidity and activity, and the duration of digestion. It is claimed that in about seven hours a substantial meal should be entirely digested, though during menstruation the process may be prolonged. Several methods are in vogue for obtaining the gastric juice during digestion.

According to Ewald, the nature of the stomach acids varies somewhat at different periods. Within the first half hour lactic acid will be formed; soon hydrochloric acid also appears, and in an hour's time the latter alone is present. Rutherford in his table shows how futile is pepsin without an acid. Many observations have led to the belief that acid is absent in fevers and gastric dilatation; but the most important hypothesis is that of Von den Velden, who insists that an absence of hydrochloric acid in the gastric juice is evidence of a cancerous neoplasm; while this would not seem to always be the case, yet the presence of this acid in the gastric secretion would be strong presumptive testimony that no cancer was present.

The best agent to detect hydrochloric acid is *tropæoline*, which gives a beautiful pink colour with hydrochloric, but not with lactic acid. The normal acidity of the gastric juice is less than 2 in 1,000, so that comparative tests are easily made.

In a case of cancer of the stomach, it would seem, then, that the patient's food should be fully pre-digested, or else a little food given with, say, two or three Fairchild's Pepsin Tabloids; this in conjunction with Zyminised Suppositories.

It seems a fortunate provision this, whereby acid is no longer abundantly secreted in gastric disease; and the importance of keeping the stomach absolutely quiescent in certain cases where the gastric juice is active appears obvious. When a portion of the stomach-wall loses its vitality, as where the vessel of a part becomes plugged with an embolus and the circulation stopped, the gastric juice can dissolve away the impaired tissues. May not a similar pro-

cess ensue after the ingestion of corrosives? As the stomach tissues, which form the floor of an ulcer after a dose of corrosive poison, &c., may be somewhat liable to be affected by the gastric juice when secreted, does it not seem as if all food should be withheld from the stomach, and the system sustained by enemata, after the immediate treatment is over? It is claimed that the pain of many dyspeptics is due to the inability of the stomach mucosa to resist the activity of the gastric juice, and thus irritation results. Sir William Roberts holds, we believe, that in dyspepsia *digestion often seems too rapid*. The overcoming of the acidity with soda tablets is of course not always to be desired on account of the subsequent tendency to increased acidity, so that the potas. bicarb. tablets are often to be preferred.

"In the treatment of ulcer of the stomach," says Dujardin-Beaumetz, "Cruveilhier has won for himself lasting renown by having been the first to describe the malady and to find the remedy. This remedy, as you know, is milk diet, carried out in all its rigorousness; on this the life of the patient depends, for if he deviates from this regimen, mortal haemorrhages may ensue. . . . Milk, and an exclusive milk diet, are also the most active curative means in chronic catarrh of the stomach" (*Therapeutic Gazette*).

"Milk occupies the first place in the dietetics of abdominal fluxes, and it is by the milk diet rigorously carried out that you will obtain the mastery of these affections. I know, in fact, of but one form of chronic diarrhoea that is rebellious to this treatment, as it is in fact to all other treatment. I refer to tuberculous diarrhoea. . . . In the diarrhoea of infancy, milk is still the remedial agent *par excellence* (the milk being suited to the age of the infant), and whenever you see in your little patients frequent greenish discharges, be persuaded that this diarrhoea results either from cold or the use of improper food" (*Ibid.*).

A little acid added to cows' milk suggests what harm the tough, hard curd may do. Probably nothing in medicine has ever afforded more brilliant results than milk which will not curdle, such as that pre-digested with Fairchild's Peptonising Powders. In the alimentary catarrh of infants, in typhoid fever and old age, peptonised foods are a boon. "The greater variety which can now be given to this form of food by the preparation of peptonised soups, jellies, and blanc-manges will obviate the monotony complained of under the continuous use of peptonised milk gruel."

Fairchild's Peptonising Powders can be obtained in boxes containing 1 dozen tubes.

BURROUGHS, WELLCOME & CO., Manufacturing Chemists, Snow Hill Buildings, LONDON, E.C.

KEPLER SOLUTION.

Dr. R. S. Hayward,
on the only prepara-
tion of cod liver oil
children will take.

From a Specialist in
Children's Diseases.

"I find children extremely fond of Kepler Malt and Cod Liver Oil. It is the only preparation of cod liver oil children will take without trouble, and the only form I have yet seen that does not impair their digestion, and that they can thoroughly assimilate. One little patient I have cannot be without it."

"There is nothing that I know of so safe and at the same time so radically curative in the constipation of infants, as your food preparation—the Kepler Solution of Cod Liver Oil in Malt. I consider that it is the only common-sense form of cod liver oil for infants to take."

*Put up in $\frac{3}{4}$ -lb. and $1\frac{1}{2}$ -lb. bottles, at 22/- and 38/- per doz. respectively,
less our usual discount.*

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

ICEBERG BRAND, in Bottles, 1/, 2/, 3/6, and 6/6.

JENSEN'S COD LIVER OIL.

Bulk Oil in Barrels and Winchesters.

Made at the Company's own Factory in BRETTESNCES, LOFODEN ISLANDS, NORWAY, the largest and the best equipped Factory in the World, with a turn-out of nearly one-half of the entire production. Bulk deliveries can be arranged in Bergen, Hamburg, or London.

HERTZ & COLLINGWOOD, 101 Leadenhall Street, LONDON, E.C.

Sole Agents and Bottlers for Jensen's Cod Liver Oil (Iceberg Brand).



SWIFT'S SPECIFIC

Is Nature's own remedy, made from roots gathered from the forests of Georgia. The method by which it is made was obtained by a half-breed from the Creek Indians who inhabited a certain portion of Georgia, which was communicated to one of the early settlers, and thus the formula has been handed down to the present day. The cut represents the method of manufacture 20 years ago, by Mr. C. T. Swift, one of the present proprietors. The demand has been gradually increasing until an extensive laboratory is now necessary to supply the trade.

THIS GREAT

VEGETABLE BLOOD PURIFIER

Cures Cancer, Catarrh, Scrofula, Eczema, Ulcers, Rheumatism, Blood Taint, Hereditary or otherwise, without the use of Mercury or Potash.

Books on "Contagious Blood Poison" and on "Blood and Skin Diseases" mailed free.

THE SWIFT SPECIFIC COMPANY,
35 SNOW HILL, LONDON, E.C.; and ATLANTA, GEORGIA, U.S.A.

WYLEYS' GELATINE COATED OVAL PILLS.

The only Gelatine Coated Oval Pills of ENGLISH MANUFACTURE in the Market. Special List of REDUCED PRICES on application.

POWDERED DRUGS. All ground in our own Mills, and of Guaranteed Purity

EXTRACTS (ENGLISH).

CONCENTRATED INFUSIONS AND DECOCTIOINS. GRANULAR EFFERVESCENT PREPARATIONS

GELATINE COATED HORSE BALLS (PATENTED).

Forwarded on application { PRICES CURRENT, LIST OF SPECIALITIES, PILL LIST (GELATINE OR PEARL COATED).

WYLEYS & CO., COVENTRY.

LONDON ADDRESS—1a BURY STREET, ST. MARY AXE, E.C.



ESTABLISHED 1859.

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BRANCH OFFICE:

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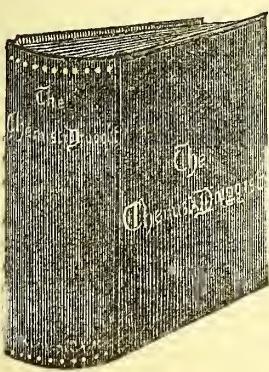
Supplied only to persons connected with the Trade.

For Australasian subscribers the subsidiary journal THE CHEMIST AND DRUGGIST OF AUSTRALASIA is included.

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WE have prepared a set of forms for small advertisements (assistants wanted, businesses for disposal, Exchange column, &c.). With these are attached tables of useful reference matter (Sale of Poisons, Postal Information, Annual Licences, Metric Weights, Measures, Medicine Stamps, Law and Public Offices, &c.). We shall be glad to send one of these sets to any subscriber who will send us an addressed postal wrapper (bearing a halfpenny stamp). As the object of this production is to encourage the insertion of such advertisements as we have named in THE CHEMIST AND DRUGGIST, we hope this offer will be taken advantage of chiefly by those subscribers who are willing to use this journal whenever opportunities occur.



THE reading cases which we offer to subscribers are now used by a very large number of chemists, and are found very convenient. They keep together thirteen numbers in very tidy form, always ready for reference. By having two cases in hand the numbers of a complete volume are always available until the time comes for binding. We sell these cases at the office for 1s., or by parcels post 1s. 3d., or two for 2s. 3d. We cannot forward them to any house for enclosure, nor by any of the carriers, as in the latter case we have to pay for booking.

We desire to obtain a full list of the limited companies in Great Britain who are carrying on the business of chemists and druggists. We shall be obliged to subscribers who will favour us with the exact names and addresses of any such companies in their respective localities. A brief indication of the character of the business done will also be useful.

COMPETITION—No. 11.

DISPENSING LABELS.

IN a paper which we published a few years ago on the cultivation of taste in the practice of pharmacy the writer laid great weight upon the printing of dispensing blanks. The principle which, he asserted, should be followed was to give the written matter prominence and to keep the name and address of the chemist in a subordinate position. The label itself is perhaps not secondary to the manner in which the directions are written; but it is evident that, however neatly a label may be printed, if the directions are badly written, or unequally distributed over the space, all that the printer has done has been undone by the dispenser. This subject is one which troubles most chemists occasionally. They want to see the labels of other chemists. Those in country districts who seldom see printers' sample books would like to know what kind of labels are used by leading houses, and every chance is taken to get a new idea. On the other hand, there is a class who would like to know for certain how much better their labels are than those of all other persons. We should like to satisfy this curiosity, and we now ask our subscribers or their employés to send us one or more of their ordinary dispensing blanks completely filled in with directions and name.

Competitors may send either or all of the particular forms. We propose to make a selection from the specimens sent to us for reproduction. Competitors should therefore pay attention to their penmanship. Writing must be done in black ink. Mixture, pill, ointment, or other dispensing labels are suitable for this competition, which will be open until July 1, and we shall award one guinea for the best label or set of labels sent in, if one person's attempt should be selected, reserving to ourselves, however, the right to distribute instead several prizes of 5s. each. Every competitor must send in his label or set of labels in an envelope bearing on the outside his name and address and the word "Competition," and this envelope must be enclosed in the one addressed to us.

ADVERTISEMENTS of employers and assistants can now be received by us up to the first post on Friday mornings, and will be inserted in the current week's issue.

IN the House of Commons, on Tuesday night, the adjourned debate on the motion for going into Committee on the Pharmacy Acts Amendment Bill was further deferred until June 24.

THE important cases which the Pharmaceutical Society has instituted against the proprietors of the Depôt (Limited) as a company, and as individuals, and against two other assistants were down for hearing in the Edinburgh Sheriff Court on Monday next, but have been postponed owing to the illness of one of the witnesses.

THE Chemists and Druggists' Trade Association of Great Britain met in the Inns of Court Hotel, Holborn, yesterday. The attendance was miserable, and the proceedings of the usual character, that is to say, many of the speakers showed that they had attended to air their grievances or their opinions, and at one time the business got somewhat mixed. In the long run, however, it was unanimously resolved by the forty odd members present to go on with the Association for a twelvemonth, which means that each one present must try to get fifty persons to subscribe half a guinea to the funds.

Metropolitan Reports.

THE COMMERCIAL TRAVELLERS' SCHOOLS.—The governors of this institution have intimated to the subscribers that on June 28 they intend to elect forty children (twenty-six boys and fourteen girls), being all the candidates passed by the board up to May 2. This lavish liberality is in celebration of the Jubilee.

THE BENEVOLENT FUND.—We understand that Messrs. Evans, Sons & Co., of Liverpool, have sent to the secretary of the Pharmaceutical Society a cheque for 100*l.*, as a special Jubilee gift to the Benevolent Fund. A supplementary list of donations is to be shortly published, and a few donations like this one, or approaching it, will yet rescue this year from the reproach of being behind its decennial predecessor in respect of donations.

CHARGE AGAINST A DRUG COMPANY.—At the Mansion House on Wednesday, George R'Eno attended before Mr. Alderman Gray in answer to a summons charging him with having obtained two sums of 5*l.* and 45*l.* by false pretences from Mr. Michael Joseph Kavanagh. It seemed that the complainant answered an advertisement requiring a secretary for the London and Globe Drug Company, of Imperial Buildings, Ludgate Circus, and he was required to deposit a sum of 5*l.* and to take 50*l.* worth of shares in the company. It was stated, on the part of the prosecution, that the defendant made certain representations to the complainant in the matter which were alleged to be false. The further hearing of the case was adjourned, the defendant being admitted to bail in his own recognisances.

CRICKET.—A match was played on June 4 between Messrs. Burgoyne, Burbidges & Co.'s club and one connected with Messrs. Gillman & Spencer's establishment. The former scored 59 against the 27 made by their opponents. Only Tate and Baugh, both in the B. B. C. & F. eleven, got double figures, their records being 11 and 12 respectively.

Last Saturday, June 11, Messrs. Burgoyne's club met a much more formidable foe in the Pharmaceutical Cricket Club, who compiled a splendid innings of 115. The chief contributors to this total were Reid 20, Quinton 22, and Poole (not out) 26. The B. B. C. & F. men, however, rose to the occasion. Bew, who went in first, stayed all through the innings, and was then unconquered with a score of 69 following his name. Fennimore was the only other double-figure scorer. His account ended with 31. Smaller figures and extras brought up the total to 123. Lamplough's bowling for the Pharmaceuticals was the most successful, the destruction of 6 wickets out of 10 being placed to his credit.

THE IMPERIAL INSTITUTE.—The following contributions have been announced recently:—

Pharmaceutical Society—Third List.

	£ s. d.		£ s. d.
Messrs. Savory & Moore ..	50 0 0	H. Matthews, Esq. ..	1 1 0
J. Lloyd Bullock, Esq. ..	2 2 0	J. W. Bowen, Esq. ..	0 10 6
A. H. Norman, Esq. ..	1 1 0	Messrs. Cruse & Co. ..	0 10 6
Messrs. Waugh & Co. ..	1 1 0	T. W. H. Hodson, Esq. ..	0 2 6
J. H. Matthews, Esq. ..	1 1 0	A. Stooke, Esq. ..	0 2 6

Chemical Societies—Third List.

	£ s. d.		£ s. d.
John E. Legg, Esq. ..	2 0 0	W. J. Palmer, Esq., M.D. ..	3 3 0
John Watts, Esq. ..	1 1 0	E. W. T. James, Esq. ..	1 1 0
James Bedford, Esq. ..	1 1 0	R. Russell Carter, Esq. ..	3 3 0
A. Booke, Esq. ..	1 1 0	Prof. Jas. Brazier, Esq. ..	3 3 0
W. O. Prosser, Esq. ..	1 1 0	Prof. J. J. Bowrey, Esq. ..	2 2 0
G. S. Bouler, Esq. ..	0 10 0		

WHOLESALE DRUG TRADES PROTECTION SOCIETY.—On Thursday of last week the annual general meeting of the members of this society was held at the Cannon Street Hotel, Mr. W. Hodgkinson, chairman. The hon. sec., Mr. Umney, read the committee's report on the recent prosecution of four persons for extensive robberies at Messrs. Horner & Sons' warehouse. All four prisoners were convicted, and the cost of the prosecution to the society was 84*l.* It was announced that when the solicitor's bill had been paid the balance at the banker's would be nearly 20*l.*, which was sufficient for the time being. The election of officers was

next proceeded with, the gentlemen who served last year being reappointed *nem. con.*, as follows:—Treasurer, Mr. Hodgkinson; secretary, Mr. Umney; auditors, Mr. Preston and Mr. Bayse; solicitors, Messrs. Humphreys & Sons. Thanks to the chair concluded the meeting.

THE ROYAL HOLLOWAY COLLEGE.—The entrance examination will be held at Queen's College, 43 Harley Street London, on Thursday and Friday, August 4 and 5. Forms of entry may be obtained from the secretary. Students who, from residence abroad or other sufficient cause, are unable to attend the entrance examination in August, may be examined at the Royal Holloway College, on Thursday and Friday, September 29 and 30. The following examinations will be accepted in place of the entrance examinations:—The London Matriculation; the Oxford Women's First Examination; the Higher Certificate Examination of the Oxford and Cambridge Board; the Cambridge Higher Local Examination in any two of the groups A, B, and C; the various senior local examinations of the universities of England, Scotland, Ireland, and the colonies, provided two languages, or one language and mathematics, are included in the pass; and such other examinations as the Governors may from time to time deem equivalent. Any candidate for a scholarship who has passed one of the above examinations may omit, if she wishes, the obligatory subjects of the entrance examination. Fifteen scholarships of 50*l.* a year each, tenable in the college for three years from its opening, will be awarded on the results of the entrance examination in August. Address of Secretary, J. L. Clifford Smith, Royal Holloway College, Egham, Surrey.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIDEFORD.

AN OVERDOSE OF CHLORODYNE.—The borough coroner of Bideford (Dr. Thompson) held an inquiry, on June 10, into the circumstances of the death of Mr. F. Cooke, of Chudleigh Villas. From the evidence it appeared that deceased was in the habit of taking chlorodyne for neuralgia, forty drops three times a day being what he generally took. He was found dead in bed on the Tuesday evening. Mr. Gooding, surgeon, produced two chlorodyne bottles which were near the deceased's bed. One was nearly full and the other empty. He attributed death to an overdose of chlorodyne, with an excessive drinking of alcohol. Dr. Ackland was of opinion that death was due to narcotic poisoning. The jury returned a verdict accordingly.

BRIGHTON.

BRIGHTON ASSOCIATION OF PHARMACY.—The first annual dinner of the Brighton Association of Pharmacy took place on Thursday, June 9, and was well attended by members and friends. The chair was taken by Mr. W. D. Savage, J.P., and, after letters had been read from Mr. Carteighe and others regretting their inability to attend, the chairman proposed the usual loyal toasts, which were heartily received. Mr. Cornish proposed the toast of "The Medical Profession," and paid a warm tribute to the high scientific and moral character of the medical profession in England, where, he believed, it stood as high as in any part of the world. Dr. Ewart, in replying, quoted the saying "A crow, a sparrow, and a Scotchman everywhere," and he judged from his experience that Anglo-Saxon doctors were almost as generally diffused. In Afghanistan, India, China, or wherever other Britshers went, there English, Scotch, or Irish doctors were sure to secure a footing. The profession fills a very important sphere in civilisation; it is a humanising profession, and, perhaps, no other profession does so much eleemosynary work. Medical men regard chemists as a complementary part of the profession. Sir W. Gull had recently said that medicine was not much good, but surely Sir W. Gull had not reflected that the English people were the most healthy, energetic, and robust people in the world, and, at the same time, the largest medicine-takers. Mr. Alderman Cox, J.P. proposed "The Pharmaceutical Society," which, he said, ha-

been established to give a better education to those who entered the calling, and to raise chemists from being mere tradesmen to something like a professional status, and this had been accomplished. Commenting on the Benevolent Fund he thought that nothing could be more kind and generous than for chemists to provide out of their meagre profits for the unfortunate ones in their calling, and that it was very creditable that over 17,000*l.* should have been distributed to deserving persons during the past ten years, and that there was no better way of commemorating the Jubilee than that proposed by the Pharmaceutical Council—to give an additional 5*l.* to all annuitants. Mr. Cortis (local secretary at Worthing) responded to this toast. Dr. E. G. Whittle proposed "The Brighton Association of Pharmacy," and in the course of his speech indicated questions which should be discussed. Mr. W. D. Savage, J.P., in responding, gave a history of the Association from the year 1861, when the first Brighton Chemists' Association was founded. Mr. T. H. Long proposed "The Visitors," for whom Dr. Ewart responded. Other toasts to Messrs. Caton and Salmon and the secretary, Mr. Marshall Leigh, followed. The meeting was enlivened by songs, recitations, &c., by Messrs. Long, Costerton, and Leigh.

BURTON.

FIRE AT A DRUGGIST'S.—Early on Tuesday morning a fire broke out at the shop of Mr. Carte, druggist, at the corner of St. Paul's Street East and Waterloo Street. The brigades of Messrs. Allsopp & Sons and Messrs. Bass & Co. were on duty with their accustomed alacrity, and they were quickly joined by the borough brigade. The fire was soon overcome, but the stock and the fittings were nearly all destroyed. Subsequent examination of the shop led to the belief that the fire had originated under the counter, and it is probable that it had been smouldering for some time before it was perceived. A large hole was burnt through the floor into the cellar below, and the flames had also risen and spread all round the shop, consuming or irreparably damaging the fittings, the bottles, &c. Mr. Carte (who is not on the register) was about retiring from business, and a sale by auction of the fittings, &c., had been arranged for the next day.

FLINT.

DURING the last few days a rumour has gained wide circulation to the effect that Messrs. Muspratt Bros. & Huntley (Limited), the well-known chemical manufacturers of Flint, have decided to immediately lay down complete plant for the production of chlorate of potassium. As the new plant will require an additional staff of workmen the rumour has been gladly received in the neighbourhood of Flint, where the Messrs. Muspratt's works have long been the chief labour-employing centre of the district.

LEEDS.

A MYSTERIOUS POISONING CASE.—A sad case of poisoning occurred here on June 10. A woman named Parry, aged twenty-four, wife of Henry Parry, striker, of 5 Marquis Street, Beeston Hill, visited a chemist's shop in Beeston Road, and purchased twopennyworth of pennyroyal, which was supplied to her by the chemist's assistant. She returned home, and drank something from a bottle, and a few minutes afterwards was taken ill, and died in great agony. It is not yet proved that what she drank was the drug which she obtained from the shop in question. It is stated that two bottles were found bearing different labels, and it is not certain which had contained the poison. An inquest was commenced on Saturday last before Mr. J. C. Malcolm, borough coroner. At the outset the coroner said he did not propose to go fully into the case that day, but only to take sufficient evidence to enable him to give a certificate for burial. It was believed that Mrs. Parry had died from strychnine-poisoning. The evidence, however, was not yet complete as to how she came into possession of the drug. He would issue an order for the contents of the stomach to be analysed.

The husband of the deceased stated that on Friday forenoon he arrived home just in time to see her die. He had been fetched from his work. That morning she had complained

of slight internal pain, but had said nothing about getting any medicine for it. He had known her buy pennyroyal when she did not feel well. Sometimes she went to Smith's, and on other occasions to Slater's—two local druggists. During the four years they had been married she had, perhaps, bought it half-a-dozen times. He knew nothing about the last purchase she had made. There was nothing of that nature in the house.

Mr. Matthew Shirley, surgeon, stated that Mrs. Parry was a total stranger to him. He was called to see her on Friday about half-past eleven in the morning. He found her lying on the floor, with her back supported by pillows. Some persons in the room were rubbing her, and others applying cold vinegar and water to her head. As soon as he entered she was seized with a fearful spasm affecting the whole body. Her head was thrown back, her eyes protruded, and her limbs were quite rigid. This lasted about half a minute, after which she fell back exhausted. She was quite conscious. He asked her what she had taken, as he saw at once that it was not a natural fit. She replied that that morning she had obtained from a druggist twopennyworth of essence of pennyroyal, which she took. Shortly after doing so she felt she had been poisoned. He approached to touch her, and she instantly fell into convulsions again. He took a bottle that was shown to him by one of the persons in the house. He did not think Mrs. Parry mentioned the name of any druggist to him. He was not quite sure on that point. He took the cork out of the bottle and tasted a drop of the contents. The strong characteristic taste of strychnine was quite perceptible. There was no other bitter like it. As soon as he touched the woman she went into convulsions—a symptom of poisoning by strychnine. He ordered an emetic of mustard and water, and sent a messenger for his stomach-pump. He himself went to his house for the customary antidotes. These he administered to the woman during the intervals between the spasms, which were, if anything, stronger than when he first saw her. The stomach-pump arrived shortly. He was fitting it together when one of the attendants said she was dead. She had just had a powerful spasm, which had fixed the chest. Death was really caused by suffocation. In his opinion death was caused by poisoning. There was no fluid left in the bottle when he got home, so he poured in 5 drops of water. He took out one of these, and tested for strychnine. He had no doubt that the bottle had contained that drug.

The inquiry was adjourned until Friday, June 24.

LIVERPOOL.

SENDING MURIATIC ACID BY RAIL.—At the Liverpool Police Court, on Wednesday, before Mr. T. F. Raffles, stipendiary magistrate, Thomas Tyson, builder and contractor, was summoned, at the instance of the London and North-Western Railway Company, for having unlawfully sent to their parcels-office, Lime Street Railway Station, two jars of muriatic acid, which in the judgment of the said company was of a dangerous nature, without distinctly marking the nature of the contents on the outside of the jars. The jars had been taken to the parcels-office without packing, but the nature of their contents was discovered, and they were not forwarded. The defendant pleaded guilty to the offence, and a fine of 40*s.* and costs was imposed.

PLYMOUTH.

A CHEMIST GETS DAMAGES.—At the Stonehouse County Court, on Monday, Arthur Bennett, chemist and druggist, of 14 Union Street, Plymouth, brought an action against John Drew, beer retailer, 1 Drake Street, Plymouth, for 5*l.* damages for having unlawfully and improperly instructed the high bailiff to levy an execution on his shop and premises. Plaintiff stated that in April last the defendant levied an execution upon his shop in respect of a claim against his brother, Richard Morrison Bennett. He did so in the face of a warning he had previously given Drew that his brother had no share or interest in the business, which was exclusively his own. His father (now deceased) carried on business as a chemist, druggist, and cigar merchant at 8 The Octagon and 14 Union Street. Witness had purchased the drug business from the trustees after his father's death, and his brother the cigar business, which he carried on at The Octagon. On a brass plate outside his door was the name R. M. Bennett, but the initials were his father's, and had not been removed,

Plaintiff's evidence was corroborated, and a verdict was given in his favour for the full amount claimed.

WAKEFIELD.

MUNIFICENT GIFT.—Mr. G. E. Smith, chemist and druggist, of Wakefield, recently offered to the governors of Dr. Crowther's Almshouse Charity for Dissenters from the Church of England to erect at his own cost, on land called St. John's Field, belonging to the Hospital Charity, six houses, which, when erected, were to be held by the governors upon trust. Mr. Smith also offered 2,000*l.* as a donation to the capital fund to the Almshouse Charity. These offers were heartily accepted, and the best thanks of the governors were given to Mr. Smith. The Charity Commissioners have required some alterations to be made in the deed of trust, and this has now been done. Mr. Smith has been appointed a life governor of the charity.

SCOTLAND.

ABERDEEN.

ABERDEEN AND NORTH OF SCOTLAND SOCIETY OF CHEMISTS AND DRUGGISTS.—The annual dinner was held in the Station Hotel, Stonehaven, on Wednesday of this week. The members attending left Aberdeen by the 12.30 train, and on arriving at Stonehaven proceeded to Dunottar Castle, which they were permitted to visit through the personal kindness of Captain W. Disney Innes, of Cowie. After exploring the many holes and corners of this interesting old ruin the members, with appetites whetted by the fresh breeze from the German Ocean, returned to the hotel, and did ample justice to the substantial repast purveyed by "mine host," Mr. Scattery. Afterwards, with toast, song, and sentiment, a happy evening was spent, the party returning to town by the 10 P.M. train. The company included representatives from Stonehaven and Auchinblae.

EDINBURGH.

MESSRS. THOMAS SYMINGTON & Co., Beaverbank Works, have obtained the highest award (silver medal) for their "Edinburgh" Coffee Essences, exhibited at the International Competition of French Culinary Exhibits of Artistic Cookery, Willis's Rooms, London.

NORTH BRITISH BRANCH.—The first Scottish Executive of the Pharmaceutical Society, which replaces the defunct Council of the branch, was appointed in January last, and since then business has gone on quite smoothly, probably because there was little or no business to do. But at last the Executive has had to face a matter intimately connected with its welfare. The members were elected for a term of one year, but the edict has gone forth that in future the election should take place in June of each year, so that the body as freshly constituted may have the sanction of the Council of the Society. This was awkward, for it would entail a double election in one year, and therefore double expense. The Executive was summoned to a meeting on Wednesday in order to consider the matter, and it was decided that another election should be carried through immediately, and that in future the elections, or voting (for the Council of the Society actually *elects*), should take place in June. The curious point about this matter is that a meeting of the Executive, with all the members present, costs much more than an election. *Verbum sapientis.*

The vacancy in the Pharmaceutical Council occasioned by the resignation of Mr. John Williams offered an opportunity for the election of a second Scotman to the Council, and there has been a rumour that the Scottish executive would propose a gentleman well qualified for the position. But in consideration of the fact that the vacancy is a London one, the executive will take no direct action in the matter, although the members are anxious to have the full representation which they have enjoyed for so many years.

PAISLEY.

CUTTING PRICES.—The business formerly conducted by Mr. Robert Graham, Bank Buildings, St. Mirren Street, Paisley, has just been purchased by Mr. Charles T. Cockburn as a branch to his businesses at Howard Street and Rutherford Road, Glasgow. Paisley is, therefore, now threatened with the same kind of competition as that which has become so common elsewhere.

WILLS.

THE will of Mr. Henry Thorburn, late of Bishop Auckland, Durham, who died on December 9 last, has been proved by Mr. Henry William Thorburn, the son and sole executor, the value of the personal estate exceeding 700*l.* The testator leaves all his property to his wife for life, and upon her death to his son absolutely.

THE will, dated December 8, 1886, of Mr. George Atkinson, late of Southall, Middlesex, chemical manufacturer, who died on December 25 last, has been proved by Mr. Henry James Turner and Mr. Carr Wigg, the executors, the value of the personal estate amounting to upwards of 28,500*l.* The testator bequeathes all his furniture, pictures, glass, plate, linen, wines, &c., and 250*l.* to his wife Maria, and he empowers his trustees at their discretion to carry on his business, so long as they shall think fit, paying the annual profits to his wife. The residue of his property he leaves upon trust for his wife absolutely.

THE will of Mr. Edward Selleck, formerly of Apothecaries' Hall, and of 24 Camden Road, Camden Town, but late of 32 Highgate Road, St. Pancras, who died on January 19 last, has been proved by Mr. Charles Compton Stuart Selleck, the value of the personal estate amounting to over 1,100*l.* The testator, with the exception of one small legacy, gives all his property to Mr. Charles Compton Stuart Selleck.

THE will, dated February 21, 1885, of Mr. Edward Beckington Smith, late of 5 Villa Place, Gateshead, Durham, chemist, who died on February 14 last, was proved at the District Registry of Durham on April 7 by Mrs. Emily Smith, the widow, the executrix, the value of the personal estate amounting to upwards of 500*l.* The testator gives all his property to his wife absolutely.

THE will of Mr. Edward Orlando Cleaver, late of 22 High Street, Croydon, Surrey, chemist, who died on January 16 last, was proved on February 16 by Mrs. Caroline Cleaver, the widow and sole executrix, the value of the personal estate amounting to over 2,200*l.* The testator bequeaths all his property to his wife absolutely.

LETTERS of administration of the personal estate of Mr. James Alderton, jun., late of Finstock, Oxford, chemist, who died on January 14 last, at Paris, a bachelor and without leaving any will, have been granted to Mr. James Alderton, the father and next-of-kin, the value of the personal estate being sworn to amount to 334*l.*

THE wills of the following medical men, deceased, have recently been proved:—

James Drummond, M.D., formerly of Glasgow, afterwards of Richmond, and late of 5 Great Cumberland Place. The personality amounts to 52,000*l.*

David Scott, M.D., late of 52 Camden Square, Camden Town. The personality amounts to 31,000*l.*

Robert Elliott, M.D., late of 93 Denmark Hill, Camberwell. The value of the personal estate amounts to over 12,000*l.*

Robert Bryce Gilland, M.D., formerly of the Berks County Asylum, but late of Fayremeade, Sevenoaks. The value of the personal estate is over 6,000*l.*

Ebenezer Watson, M.D., of Glasgow. Value of the personal estate in England and Scotland exceeds 12,000*l.*

Surgeon-General William Rutherford, M.D., C.B., honorary physician to the Queen, late of 325 Vauxhall Bridge Road. The personality exceeds 49,000*l.*

Dayrell Joseph Thackwell Francis, M.D., F.R.C.P., formerly of Northampton, and late of Wethersell Grange, Cranleigh. The deceased leaves property exceeding 30,000*l.* in value.

John Jackson, M.D., a retired officer of the East India Company in their Bengal establishment, late of 5 Brunswick Terrace, Brighton. The value of the personal estate exceeds 15,000*l.*

Letters of administration of the personal estate of Thomas Allen, M.D., late of 11 Keppel Street, Russell Square, were granted on April 28, the value of the personal estate amounting to upwards of 14,000*l.*

Mr. George Curme, late of 9 Cornhill, Dorchester, surgeon. Personality, 8,500*l.*

Legal Reports.

A QUESTION OF LIABILITY.

In the City of London Court on June 10, before Mr. Commissioner Kerr, the case of Bartlett Hooper & Co. v. Annett was tried. The action was brought by Messrs. Bartlett Hooper & Co., chemists, of 43 King William Street, E.C., to recover 4*l.* 13*s.*, goods supplied to the defendant, Mr. Alfred Geo. Annett, chemist, of 18 Norton Folgate, E.C. The case came before the Court some weeks since, when the plaintiffs said that the order was given by the defendant's manager. The authority of the manager to give orders was disputed, and the case was adjourned until Friday to prove the authority. On the second hearing Mr. Melsheimer, counsel for the defendant, said their servant turned out to be dishonest, and the order in question was given contrary to their instructions. The plaintiffs' representative said the goods were supplied to the defendant's branch establishment, and he produced some of them which had been exhibited in the shop. The learned Commissioner said he must enter a nonsuit. The defendant could not be made to pay for goods he had not ordered. Judgment accordingly, the defendant's costs being allowed.

UNQUALIFIED MEDICAL ATTENDANCE.

An appeal raising an important medical question came before Lord Coleridge and Mr. Justice Denman, sitting in the Queen's Bench Division of the High Court of Justice, on Saturday last.

The action in the Salford court was by the assignee of one Fitzmaurice, a qualified medical practitioner at Bury, to recover from a person living at a village near that town a sum of 18*l.* 12*s.* for medical attendances and medicines for a period from 1880 to January last. It appeared that the actual attendances had been by an unqualified assistant of Fitzmaurice, and that he prescribed and made up the medicines, Fitzmaurice himself taking no part in the business. At the trial it was objected that under the 21 and 22 Vict. c. 90, the plaintiff could not recover, as the attendances were by an unqualified person. And the judge so thought, and directed a nonsuit. The plaintiff now appealed from that decision.

Mr. Willes Chitty, who appeared for the plaintiff, contended in law that the medical attendances were by the principal, who was a qualified practitioner, and not by his assistant.

Lord Coleridge: Then your contention comes to this—that a qualified medical practitioner may employ any number of unauthorised persons to administer medicines, and (to use an expression of Lord Ellenborough's) to make our stomachs the arena for the struggles of opposing poisons. (Laughter.)

Mr. Chitty: The principal was qualified.

Lord Coleridge: But the unqualified person prescribed, and that was the ground on which the judge decided—viz., that the qualified person who sued had not attended or prescribed.

Mr. Chitty: He had by his agent.

Lord Coleridge: Who was unqualified. It is a very serious question. Patients have been killed by mistakes of unqualified persons. In one instance a person was killed by an assistant giving him six grains of strychnine instead of six grains of salicine, a rather serious mistake. One does not like the idea of one's life being terminated by such a mistake.

Mr. Chitty: If this view is to prevail a doctor cannot keep a boy.

Mr. Justice Denman: Oh, yes, he can; but he must not send his boy to attend his patients, feel their pulses, and prescribe for them. If you are right he may send his boy or his butler to attend them.

Mr. Chitty: Business is constantly done by servants.

Lord Coleridge: But the Act says that an unqualified person shall not recover for attendances or medicines. And here the qualified person did not attend or prescribe.

It being urged that though the plaintiff did not attend personally, but did by his agent, Lord Coleridge asked: How can a medical man attend or prescribe for a patient unless personally?

Counsel went on to urge that there is nothing illegal in an unqualified person attending patients for a qualified person, only the unqualified person cannot recover for the attendances. That is the only effect of the Act.

Lord Coleridge: That view would defeat the whole object of the Act, which is to prevent unqualified persons from acting. To hold that they may act, and that, though they cannot recover, their employer, if qualified, may do so, would certainly defeat the very object of the Act. The question is, were the services here rendered by the qualified person?

Mr. Chitty: No doubt that is the question. But a medical man may render medical services by his assistant.

Lord Coleridge: Not so, legally, if his assistant is unqualified.

Mr. Justice Denman: The question is whether a qualified practitioner can recover for services he has not rendered, but only by an unqualified assistant.

Mr. Chitty: That, no doubt, is the question; and why should he not recover for such services, just as a solicitor can recover for services rendered by his clerk?

Lord Coleridge: For clerks work, and only clerks' work.

After Mr. C. A. Russell had addressed the Court for the other side,

Lord Coleridge said the unqualified person had actually rendered the services, and the action was brought by his employer, no part of the services having been personally rendered by him—that is, not physically, for the services of a medical man were rather intellectual; and if the qualified practitioner, being at hand, really directed the attendances and the medicines, he might possibly recover for services thus rendered. But here the attendances were really by the unqualified person, and the Act said that no person should recover for medical services unless he was qualified and registered. In the present case the medical man whose representative sued had not himself rendered any medical services—that is, had not attended nor prescribed, and a medical man could not recover for attendances not really rendered by him. The judge, therefore, was right in directing a nonsuit. There was no case which had established the contrary. But it had been held that an unqualified person could not sue his employer or his patients for attendances or medicines ("Alvarez de la Rosa v. Prieto," 16 "Common Bench Reports," N. S., 578); and then there was the later case already cited, "Leman v. Houseley," to the same effect. There were two earlier cases, indeed, in the Irish Courts, apparently to the contrary effect, but these were overruled by the later cases, and to these later cases he adhered. The medical man whose representative sued had not rendered the services sued for, and he could not recover, and therefore the nonsuit was right.

Mr. Justice Denman concurred, observing that the medical man here did not show that he had rendered the services sued for, and so he could not recover. The services sued for were rendered by another person, who was unqualified, without any consultation with him. It was urged that this person acted as his servant; but a qualified practitioner could not thus authorise an unqualified person to act for him in medical attendance. It would be a mockery to apply the doctrine of master and servant to such a case, and it would entirely defeat the intention and object of the Act.

Appeal accordingly dismissed.—*Times.*

THE DENTISTS' REGISTER.

JUDGMENT was delivered on Wednesday in the Queen's Bench Division of the High Court in the case in which an application had been made on behalf of Mr. H. F. Partridge for a mandamus ordering the General Council of Medical Education of the United Kingdom to restore the name of Mr. Partridge to the register of dentists kept under the Dentists Act, 1878. The rule was argued last sittings before Mr. Justice Mathew and Mr. Justice A. L. Smith.

Mr. Justice Mathew now delivered the judgment of the Court. His Lordship said: The applicant had, since 1867, practised in the metropolis as a dentist, and it was admitted that when the Act passed he would have been entitled to be registered as a dentist, if an application had been made by him in accordance with the provisions of section 7. He had not, however, applied for registration in respect of this qualification. In 1878 he obtained from the Royal College

of Surgeons, Ireland, a diploma in dentistry, and as a licentiate of this body, which was one of the medical authorities referred to in the Act, he applied for and procured registration under the statute (section 6). The diploma had been granted on the terms that the holder should not seek to attract business by advertising, or by any practice considered by the College unbecoming, and that the diploma might be cancelled on its being proved to the satisfaction of the President and Council that he had done so. In the year 1883 the Royal College of Surgeons of Ireland, upon the ground that Mr. Partridge had advertised for business, cancelled his diploma, and thereupon the General Council directed his name to be erased from the register. Section 11 contains provisions as to the corrections to be made from time to time in the register, and it was argued for the General Council that where the original qualification no longer existed the Council were bound to correct the register and erase the name. It was argued for the applicant that the name of a person qualified, either by practice or diploma, and once properly placed on the register, could only be erased in the manner and upon the grounds specified in the statute. It was urged that the mere fact that the diploma had been cancelled by the medical authority which had granted it was not a ground upon which the General Council was justified in disqualifying the applicant or exposing him to the penalties imposed by the Act upon unqualified practitioners. We are of opinion that the contention of the applicant is right, and that he is entitled to have his name restored. [His Lordship here read section 13, and also referred to section 15.] It appears to us that, in such a case as the present, the Medical Council possessed no further powers of dealing with the register than those conferred in the sections referred to. It was admitted that the Council had not decided that Mr. Partridge had done anything to justify the removal of his name under section 13, but had considered that they were bound to erase his name when the determination of the medical authority granting the diploma had come to their knowledge. This is a course which, it seems to us, they were not entitled to adopt, otherwise where a medical authority has withdrawn a diploma on the ground, for instance, that a particular theory of dental surgery had been adopted or discarded, the name of the holder must be struck from the register. But this is a ground upon which the General Council, under section 13, are expressly prohibited from erasing a name. The third clause of section 13 appears to show that the Council was not intended to be bound by any determination of the medical authority, even with respect to the grounds for erasing a name specified in section 13, but was required to adjudicate independently. This view is strengthened by an examination of the provisions in the last clauses of sections 13 and 14. The Act appears to be carefully framed to restrict the right of the General Council to interfere with registered dental practitioners in the practice of their profession to the cases where there are the grave reasons for disqualification specified in section 13.

The rule for a *mandamus* was accordingly made absolute, but on an application on behalf of the Council was ordered not to be drawn up for a week.

Mr. Finlay, Q.C., and Mr. Lyon were for the applicant; and Mr. Kennedy, Q.C., and Mr. Muir Mackenzie for the Council.

J. & E. ATKINSON v. JAMES ATKINSON & CO.

THE appeal of the defendant in this case was heard on Wednesday last in the Court of Appeal by Lords Justices Cotton, Bowen, and Fry. The plaintiffs are Messrs. J. & E. Atkinson, perfumers, of New Bond Street; and the defendant is Mr. James Atkinson, carrying on the business of a perfumer, under the style of James Atkinson & Co., at Finsbury Square. In May last Mr. Justice Kay, on the application of the plaintiffs, granted an injunction restraining the defendant until the trial or further order from trading as James Atkinson & Co., from representing that any person in his firm is or ever was a member of the firm of J. & E. Atkinson, and from instructing his travellers to represent that he was a brother or any connection of the members of that firm, or was the originator of the perfume known as "White Rose," or that the true and original white rose perfume is made by the defendant's firm, or by any other person or persons other than the plaintiffs' firm.

Mr. Wilkinson appeared for the appellant, and the respondents were represented by Mr. Marten, Q.C., and Mr. Allen.

In opening the appeal, Mr. Wilkinson said that the appellant had carried on business as a perfume manufacturer for some twenty years, partly as James Atkinson and partly as James Atkinson & Co. The plaintiffs were the well-known firm in Bond Street, and had been in business for about thirty-five or forty years. The allegation of the plaintiffs was that the defendant's travellers had made representations that there was some relationship between the defendant and some members of the plaintiffs' firm, and also that the defendant was the original maker of the "White Rose" perfume. The plaintiffs' case was based upon three alleged misrepresentations—one made to a Mr. Kirk in February and March last, a second to a Mr. Lane in February, and a third to a Mr. Nash, buyer for Mr. Whiteley, of Bayswater. It was not alleged that the defendant himself had made any such representation.

Lord Justice Fry asked whether the defendant claimed that he was entitled to make these representations.

Mr. Wilkinson : No, my Lord. We allege that we never did make them.

Lord Justice Fry : Is it worth while, then, to fight this on an interlocutory application?

Mr. Wilkinson said it was a very serious matter to the appellant. The appellant stated that he had always been alive to the difficulty that might arise from two men of the same name being in the same trade, and that he had warned his travellers to be most careful to explain, if ever the question arose, that there was no relationship whatever between him and the members of the plaintiffs' firm. It was quite clear that, if there had been any misrepresentation at all, it had been in defiance of the appellant's direct instructions. This being so, Mr. Justice Kay certainly ought not to have made an interlocutory order. The learned Judge had compared a bottle put in by the appellant with one exhibited by the plaintiffs, and had assumed that because they were similar in appearance, and because whilst one of them had stamped upon it the name of "J. Atkinson, London," and the other the name of "J. & E. Atkinson, London," there had been an intention to deceive on the part of the defendant. Evidence had, however, since been put in by the defendant to the effect that similar bottles were used by a great many of the perfume manufacturers, and six or eight of them, belonging to different firms, were in Court. The learned Judge had been led into an error by the way he had compared the bottles without taking any evidence regarding them. Mr. Justice Kay's decision had been reported at length in the trade papers, and it was positively a finding that the defendant had been guilty of gross deceit.

Lord Justice Fry said it was not very satisfactory to try an issue of that sort on affidavit evidence alone.

Mr. Wilkinson observed that that was exactly what he had submitted in the Court below.

Lord Justice Fry asked whether the points in dispute could not be postponed until the trial.

Mr. Wilkinson pointed out that the plaintiffs had obtained an order against the defendant. The learned judge's decision had been expressed in very clear and decisive language, and it had become a very serious matter, both morally and from a business point of view, for the defendant. As long as the decision of the Court below stood the defendant could not recede from the appeal.

Lord Justice Cotton : We understand you to say that you never made any such misrepresentation, and that you claim no right to do so.

Mr. Wilkinson said that was the case.

Lord Justice Cotton said he should have thought that under those circumstances Mr. Marten's course would be to let the motion stand until the hearing on the defendant giving an undertaking. The defendant's case was that he gave no cause for the action, and that he did not intend to make any of the representations complained of. This being so, it seemed to be wasting the time of the Court to deal with the matter now, when it could not be dealt with finally.

Mr. Marten observed that he would be content with an undertaking in the terms of the injunction. These interlocutory matters never prejudiced any question. He would therefore take an undertaking instead of the injunction. He had no objection to the costs being dealt with at the trial, and he

did not want to have the matter discussed if the defendant was prepared to give an undertaking.

Lord Justice Fry: Will you be content with this—the defendant, without prejudice to any question in the case, to give an undertaking that he and his servants will not, until the trial of the action, make any of these representations, the motion to stand until the hearing, and the costs to be costs in the action?

Mr. Marten said an undertaking was as good as an injunction, and he was quite willing to the insertion in the order of words providing that the undertaking should be without prejudice. He might point out, however, that the defendant had never made any such offer in the Court below.

Mr. Wilkinson: The whole case has been reported in the trade journals, and I hope that, in order to do away with the effect of that upon the public mind, your Lordships will put in some words.

Lord Justice Fry: We do not frame our orders in view of their effect on the public or trade journals, but in order to do justice to the parties.

Lord Justice Cotton said that, on the defendant, without prejudice, giving the undertaking, the motion would stand over until the hearing, the costs to be costs in the action.

Mr. Marten asked whether this order would be substituted for the order in the Court below.

Lord Justice Cotton: Yes.

Order accordingly.

TAKING ORDERS.

In the City of London Court, on Wednesday, before Mr. Commissioner Kerr, the case of Maynard *v.* Davidson was tried, which raised a question of considerable importance to wholesale druggists in their relations with medical practitioners. The plaintiff, Mr. Robert Henry Maynard, trading as C. H. Warner & Co., wholesale druggists, carrying on business at 55 Fore Street, E.C., sought to recover the sum of 3*l* 6*s*. 7*d*. for drugs supplied to the defendant, Dr. John Matthew Davidson, of 121 Goswell Road, E.C. Mr. T. A. Nelham appeared for the plaintiff, and the defendant appeared in person. The defence was that the drugs were ordered by an assistant who had no authority to do so, and that the defendant knew nothing of the matter until the plaintiff found he could not get the money from the man who gave the order.

Mr. Nelham, in opening the case, said the defendant placed an unqualified assistant into some premises at Lever Street, and had his (defendant's) own name over the door. An order was given by the assistant, for drugs, and credit given to Dr. Davidson. They should not have given credit to an unqualified assistant. He could prove the delivery of the drugs to Mr. Davidson's surgery.

The learned Judge: You must go further than that.

Mr. Nelham: I can go further than that. I can call the assistant, and he will say he was authorised to pledge the credit of his master, and I will call the traveller to show it is the usual custom of the trade to take orders from assistants, and for the doctors to pay for such goods ordered.

The learned Judge: I don't care for all the customs and usages of the trade. All the customs cannot give the assistant authority to give orders. Do you admit the delivery Dr. Davidson?

The Defendant: No, your Honour, I do not admit anything.

Mr. William R. Gosling, manager to the plaintiff, was called, and said it was part of his duties to execute all orders received on behalf of the firm. The drugs being sued for in this action were ordered either from one of the boys or through one of their travellers named Gibbs. Doctors' assistants generally gave orders for drugs, and the accounts were invariably met.

The learned Judge: You take the orders on the risk of getting the money?

Dr. Davidson said he had subpoenaed the plaintiffs to produce his written orders if they had them.

The learned Judge: Do you want to prove the plaintiff's case?

Dr. Davidson: No, oh no, sir.

The learned Judge: Otherwise you will do better to hold your tongue.

The witness Gosling, cross-examined, said he never gave credit to anyone except Dr. Davidson.

Evidence was given by Mr. George S. Gibbs, of 148 Caiford

Street, Kingsland, the plaintiff's traveller, who said that it was a part of his business to call at the defendant's surgery in Lever Street. He received the order for the drugs, which were sent over by the boy, and the order was given by Dr. Davidson's assistant. When he went into the surgery he asked for Dr. Davidson, and the assistant answered by asking him what he wanted. He certainly thought the assistant, whose name was Wheeler, was Dr. Davidson himself.

The learned Judge: The man represented himself to be Dr. Davidson?

The Witness: The first time I knew his name was Wheeler in April. The charges we make are all fair and reasonable. Wheeler gave me Dr. Davidson's name and address, and of course all the drugs were sent.

The learned Judge: You may assume the assistant ordered the drugs. The next time you buy a coat, give him my card and address, and see if you will get the money from me. You have not shown yet that the assistant had the defendant's authority to pledge his credit.

Mr. Frederick W. Wheeler, of 6 Creek Street, Deptford, who said he was a surgeon's assistant, was then called. He stated that formerly he was the assistant to the defendant, at 117 Lever Street, E.C. He ordered the drugs in question, and they were all delivered to 117 Lever Street, and used in the business of the defendant.

The learned Judge: Had you the defendant's authority to give the order?

Mr. Wheeler: I considered I had; I had no written authority.

Mr. Nelham: Would you have neglected your duties if you had failed to order these drugs?

Mr. Wheeler: Yes; I could not have carried on the business without them.

The learned Judge: Had you your employer's authority? You will not answer the question.

Mr. Wheeler: He told me to order drugs when wanted. He gave me no written authority.

The learned Judge: Did he give you verbal authority?

Mr. Wheeler: It is the usual thing for an assistant to order drugs.

The learned Judge: Did you tell the defendant you had ordered the goods?

Mr. Wheeler: No, I did not. He knew I must have some drugs. They were used in Dr. Davidson's business for his patients.

The defendant then went into the witness-box. In his evidence he said he never authorised his late assistant, Wheeler, to order drugs. The usual way was for a boy to go and get the drugs and pay ready money.

The learned Judge said that ended the matter.

Mr. Nelham submitted whether it was not sufficient authority, if the defendant put his name over the door of the surgery and placed an unqualified assistant there, taking the profits on the business, for the traveller to take an order from the assistant in the shop.

The learned Judge: No doubt a man putting his name over a shop represents himself to be the owner of the shop. But every man who puts his name over a door does not authorise an assistant to pledge his credit for goods.

Mr. Nelham: The defendant did not attend there.

The Defendant: Yes, I did every day.

The learned Judge: If you sell goods to a man who has no authority to pledge his master's credit you must take the responsibility. You can bring your action against Wheeler, and call Davidson as a witness. I must enter a nonsuit. I think it is very likely that if Dr. Davidson was called upon to attend a woman in childbirth and this assistant went for him and the woman died Dr. Davidson would be indicted for manslaughter. I must find for the defendant.

Judgment was entered for the defendant accordingly, and costs allowed.

NICHOLLS *v.* KIMPTON.

In this case Mr. Francis Nicholls and Mrs. Frances Kimpton applied, in the Chancery Division, before Mr. Justice Kekewich, against Mr. Henry Burgess Kimpton and Hannah Louisa Kimpton, his wife, for an injunction to restrain the latter from carrying on the business of medical booksellers or "dealers in osteology," or any similar business, under the style of "H. Kimpton," or under any style, or in any manner

calculated or likely to deceive the public into the belief that the business so carried on by them was the business of the plaintiffs. About 1846 Henry Kimpton, the late husband of Frances Kimpton, began a business as medical bookseller, under his own name, at 82 High Holborn, which he continued till his death in 1872. After his death the business was carried on in the same name by his widow, Frances, in whom the goodwill was vested, until July 1886, when she was adjudicated a bankrupt. Nicholls was her trustee in bankruptcy. After the bankruptcy the business was carried on under the supervision of the Official Receiver, but it was afterwards agreed that the business should be vested in Frances Kimpton, and that her bankruptcy should be annulled. The defendant, H. B. Kimpton, was employed by his mother, Frances, as assistant or manager till April 1886. In October 1886 he became occupier of 67 High Holborn, and, apparently with funds belonging to his wife for her separate use, commenced to carry on the business complained of. The plaintiffs alleged that this was done with intent to deceive the public, and in particular the customers of the plaintiffs, and to represent the business at 67 High Holborn as the business carried on by the plaintiffs, and that by the conduct of the defendants the public had been deceived, and business wrongfully diverted from the plaintiffs.

Mr. Justice Kekewich, in granting the injunction, based his judgment on the well-known case of "Burgess v. Burgess" (3 "D. G. M. and G." 896), the report of which had been well recognised for many years as containing an accurate statement of the law. The principle is that any man or woman may trade in his own name or in any other name so long as he did it honestly. But he must not so carry on business as to induce the public or his customers to believe that he was carrying on a business which did not belong to him. His Lordship said that, although the full name of the defendant was Henry Burgess Kimpton, he had been familiarly called "Harry" for a large portion of his life, and therefore the use of the style "H. Kimpton" was not fatal, nor very much against him. Nor could his Lordship rely on the fact that the new business was at 67 High Holborn, the old one being at No. 82, though that could not be left entirely out of consideration. Turning to the notices and price-lists, his Lordship was bound to say that great care had been taken by the defendant to show that the business was only at 67, he evidently wishing to distinguish it from No. 82, and he would give the defendant the benefit of this. But, taking all things into consideration, and noting that some customers had thought that he was carrying on the old business, his Lordship would probably have been bound to come to the conclusion that the defendant was using his name in such a manner as to mislead the public into believing that he was the successor in business of his father or mother. But beyond that the defendant when out of employment had managed a business for his wife, and had carried it on still under the style of H. Kimpton, though her name was Hannah Louisa Kimpton, and she had never been known as H. Kimpton or Hannah Kimpton. On the evidence there appeared no excuse for her taking a name which was not hers.

BANKRUPTCY REPORTS.

Re C. E. A. SEMPLE, 89 Goldhawk Road, Shepherd's Bush, and Torrington Square, Doctor of Medicine.

ON Tuesday of last week this debtor applied to Mr. Registrar Brougham at the London Bankruptcy Court for his order of discharge. The receiving order was made upon a creditor's petition on February 18 last, and the liabilities are returned at 1,876*l.* 6*s.* 8*d.*, against assets 76*l.* 1*s.* The bankrupt appears to have practised as a physician since 1872, and attributes his failure entirely to the result of an action for libel, in which the plaintiff, the petitioning creditor (Mrs. Weldon), obtained a verdict against him, and his deficiency of 1,800*l.* 5*s.* 8*d.* shown in the statement of affairs is explained by damages and costs (1,590*l.*) and excess of expenses over income resulting from the circumstance above mentioned. No offences were reported against the bankrupt, and there was no opposition, and His Honour granted the order of discharge.

Re E. TAYLOR, Birmingham, Drysalter.

THE statement of affairs in the above estate shows liabilities to creditors, 487*l.* 15*s.* 4*d.* Assets consist of stock-in-trade, estimated to produce 15*l.*; book debts, good 6*l.* 18*s.* 2*d.*, doubtful 23*l.* 18*s.* 1*d.* (estimated to produce 12*l.*)—33*l.* 18*s.* 2*d.*, less preferential creditors for rent, rates, &c., 27*l.* 10*s.*; net assets, 6*l.* 8*s.* 2*d.*; deficiency, 481*l.* 7*s.* 2*d.*

W. B. ADAMSON, Newcastle-on-Tyne, Druggist and Drysalter.

AT the Newcastle Bankruptcy Court, on June 9, this bankrupt came up for his first examination. In reply to questions, the debtor said he had been in business four years, at 69 Bath Lane, Newcastle, and had resided at 24 Belsay Place. He had been in business previously, and in 1873 or 1874 he filed his petition in the Newcastle Court. On that occasion he was adjudicated a bankrupt. He never applied for his discharge, and had never got it. The Official Receiver: So you are an undischarged bankrupt under the Act of 1869? Debtor: Yes. Between the date of his first petition and his commencing business four years ago he had been a traveller. When he commenced the second time he had a capital of 30*l.*, his own money, and he borrowed 40*l.* from his wife's brother. His liabilities amounted to 250*l.* 4*s.* 7*d.*, and his assets to 207*l.* 2*s.* 10*d.*, leaving a deficiency of 43*l.* 2*s.* 4*d.* He attributed his insolvency to his inability to realise book debts speedily enough, and to his having to write off bad debts. The examination was eventually adjourned.

Gazette.

PARTNERSHIPS DISSOLVED.

DAEELL & HICKTON, Nottingham, mineral water manufacturers.

FRODSHAM, ROUGHTON & BARNES, Streatham, Surrey, surgeons, as far as regards J. W. Roughton.

GIESON & HEPWORTH, Normanton, aerated water manufacturers.

MARRIOTT, W., & Son, Huddersfield, manufacturing chemists.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

DUTTON, GEORGE WILLIAM, Tibshelf, Derbyshire, medical assistant.

HALLIWELL, JOSEPH, Scarborough, chemist and druggist.

PRATT, HENRY JAMES, York, chemist and druggist.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

DUTTON, GEORGE WILLIAM, Tibshelf, Derbyshire, medical assistant. June 22, Official Receiver's offices, Derby; July 11, County Hall, Derby.

HALLIWELL, JOSEPH, Scarborough, chemist and druggist. June 17, Station Hotel, York; July 1, Court House, Scarborough.

PRATT, HENRY JAMES, York, chemist and druggist. June 17, Official Receiver's Office, York; July 8, Guildhall, York.

ADJUDICATIONS.

DUTTON, GEORGE WILLIAM, Tibshelf, Derbyshire, medical assistant.

HALLIWELL, JOSEPH, Scarborough, chemist and druggist.

PLOMLEY, WILLIAM, Peasmash, Sussex, veterinary surgeon.

PRATT, HENRY JAMES, York, chemist and druggist.

NOTICES OF DIVIDENDS.

INGLEDEW, GEORGE, New Road, Woolwich, surgeon. First and final dividend of 3*s.* 4*d.*, June 17, Official Receiver's offices, 109 Victoria Street, Westminster.

KEITH, THOMAS, High Street, Glamis Road, Shadwell, bottle-crate and packing-case manufacturer. First and final dividend of 10*l.* any day except Saturday, Chief Official Receiver's offices, 33 Carey Street, Lincoln's Inn.



The following applications for Patents have been registered at the Patent Office.

Alkalies.—7,661.—May 26, 1887.—W. G. MacIvy. A new way of making soda.—7,859.—May 31, 1887.—L. A. Staub. Manufacture of carbonate of soda and carbonic acid from the bicarbonate.—8,289.—June 9, 1887.—W. Bramley. Obtaining chlorine or hydrochloric acid from chloride of calcium.

Bronchial Vaporiser.—7,480.—May 23, 1887.—A. Drake and C. Hassam. A bronchial vaporiser and food warmer combined.

Brushes.—8,257.—June 8, 1887.—J. Meek. Shaving-brushes.

Cattle Medicine.—6,479.—May 3, 1887.—G. Gilmour and R. I. Runciman. A food or medicine for cattle and other live stock.

Disinfectants.—6,571.—May 4, 1887.—J. W. Hamilton. Disinfectants.—8,217.—June 8, 1887.—G. H. Bolton, J. R. Wylde, and H. Auer. Manufacture of permanganate of soda, or of a mixture of the same with other disinfecting or oxidising matter.

Ferric Sulphate.—8,213.—June 8, 1887.—S. Hallsworth and R. Bailes. A method of manufacturing ferric sulphate or sesqui-persulphate of iron, commonly called nitrate of iron.

Hydrogen Gas.—7,518.—May 25, 1887.—J. Belou. A new process for manufacturing pure hydrogen.

Medicinal Preparations.—7,534.—May 25, 1887.—R. M. H. Hicks. A composition for healing wounds and sores.—7,678.—May 26, 1887.—A. Carcenat and L. Rivet. Apparatus for facilitating the absorption of liquids for medicinal and other purposes.

Oils (Medicinal).—6,518.—May 4, 1887.—B. Weale, W. Weale, and J. Weale. A mixture of oils for the relief of human ailments (the "Shropshire" patented oils).

Pessary.—6,488.—May 3, 1887.—H. A. Dow. The "Aitken Dow" pessary.

Phosphorus By-products.—7,504.—May 23, 1887.—P. G. W. Typke. The utilisation of by-products in the manufacture of phosphorus compounds.

Polish.—6,583.—May 5, 1887.—R. Hutchinson. A polishing powder.—7,159.—May 17, 1887.—H. Dell. A polish for leather, furniture, &c.

Powder-holders.—7,583.—May 25, 1887.—M. Wedlake. A receptacle for toilet-powders.

Resins, &c.—6,674.—May 6, 1887.—S. Banner. Treating resins, oleo resins, gums, pitches, varnishes, bitumens, tars, oils, fats, &c.

Surgical Appliances.—6,391.—May 2, 1887.—J. Williams. Abdominal belt.—6,488.—May 3, 1887.—H. A. Dow. Pessary.

Truss.—7,915.—June 1, 1887.—R. Harrison. Improved surgical truss.

Varnishes.—7,376.—May 20, 1887.—F. Crane. Lacquers and varnishes.—7,377.—May 20, 1887.—By the same. Varnishes.

Specifications of Patents recently published.

1887.

- 3,437. R. Durling. Curative medical coils. 4d.
- 4,691. G. F. & E. H. Horsey. Tooth-brushes. 6d.
- 5,018. A. J. Meyer. Syringe pipes. 6d.
- 5,158. H. W. Lowden. Marking soap and other tablets, &c. 4d.

1886.

- 8,308. L. Mond. Obtaining chlorine. 6d.
- 8,488. A. Jacobelli. Administering medicines. 1s. 1d.
- 8,572. A. P. Patterson. Dentures for artificial teeth. 8d.
- 8,756. R. Tervet & F. Alison. Treating and purifying paraffin, wax, &c. 1s. 1d.
- 11,008. R. C. Scott. Effervescent, &c., beverages. 6d.

TRADE-MARKS APPLIED FOR.

THE Trade Marks Journal publishes the following notice:—"Any person who has good grounds for objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings, London, W.O.

From the "Trade Marks Journal," June 8 and 15, 1887.

- "MATTHEW'S MALTHOP," and other wording, on oval label; for a mineral water. By A. R. Matthews, Middleton, near Manchester. 60,498.
- "THE CRYSTAL STRAMONIUM CIGARETTE," and other wording, on label; for cigarettes for asthma, &c. By T. F. Grace, 11A Buck Street, E.C. 60,749.
- Figure of a rose; "Rose Brand," and figure of a rose; the same with designation of the depositors, on design; for soda ash, &c. (Class 1). By the Lancashire Alkali and Sulphur Company (Limited), Liverpool. 60,780-2.
- "KOH-I-NUR"; for bronze powder, &c. By C. Schleak, 14 Aldersgate Street, E.C. 61,193.
- "MCK. & R."; for pills. By McKesson and Robbins, 38 Market Lane, E.C. 61,309.
- "MATHIESON" and "N. Mathieson & Co.;" for bleaching powder. By N. Mathieson & Co., Widnes. 61,321-2.
- "MELROSINE"; for preparations for the hair. By S. R. van Duzer & Co., 110 Southampton Row, W.C. 61,601.
- "LEMON CURD," on figure of a cheese cake; for preparation used in pastry-making. By H. Spring, trading as Spring & Co., Brigg. 62,209.
- "GOLDEN REIGN"; for essences. By Haynes & Finemore, 4 Whitfield Street, Finsbury. 62,337.
- "ECLIPSE" and figure of a horse over representation of solar eclipse; for medicines and medicinal preparations. By J. H. Lewis, 22 Great Portland Street, W. 58,875.
- "SANITARY DRY LIME DISINFECTING POWDER" and other wording on label; for disinfecting powder. By M. Williams, Bootle, Liverpool. 58,890.
- "ORIGINAL 'INTENSE BRAND' CARAMEL" on diamond-shaped label; for caramel. By A. Boake & Co., Warton Road, Stratford, E. 60,354.
- "SAPO DETERGENT DENTALINE" on label; for liquid dentaline. By The Sapo Detergent Dentaline Co., 10 New Broad Street, E.C. 61,564.
- "MELROSINE"; for a preparation for the hair. By S. R. Van Duzer & Co., 116 Southampton Row, W.C. 61,603.
- "COCKLE'S COMPOUND ANTIBILIOUS PILLS"; "Compound Antibilious Pills" and other wording on label; "Cockle's Pills"; and "Cockle's Compound Pills"; for pills for human use. By J. Cockle & Co., 4 Great Ormonde Street, W.C. 61,742-5.

Figure representing the filtering portion of a water-filter, the different layers being named; for water-filters. By Mawson, Swan and Weddell, Newcastle-on-Tyne. 61,945.

"ALLOPATHIC-HOMOEOPATHIC-BOTANOPATHIC" and other wording on circular label; for substances and preparations for use in medicine and pharmacy. By W. H. Macaulay (trading as the Trio Drug Company), Wakefield. 62,290.

HUNGARIAN BITTER WATERS.

A CORRESPONDENT of the *Times* has recently given an interesting account of the bitter waters of Hungary, several of which are now largely consumed in this country. We get the following facts from his letter:—

The plain where these waters are found is about half-an-hour's drive from Buda-Pesth, on the right bank of the Danube. About the year 1853 an inhabitant of Buda was the proprietor of the ground upon which the Queen Elizabeth Salzbad now stands. He was named George Schleiss, and he was a market-gardener. The only water accessible was at some distance from his garden, and he required much of it in the hot weather to water his vegetables. Unless the ground be plentifully watered during the hot months no plants will thrive in this locality. Accordingly, he dug a well to the depth of 30 feet, and found water in abundance. As it had a salt taste he did not use it for drinking purposes, but applied it solely to irrigate the ground. One day a gentleman who had been out hunting was returning home, and, being thirsty, he drank of the water, which he at once pronounced to be highly mineralised, and he advised the proprietor of the well to have this tested by analysis. George Schleiss took some to a chemist, named Francis Unger, who was so much impressed with its medicinal properties that he entered into partnership with him, and from the year 1853 the bitter water became an article of consumption and commerce.

Before the fame of this water was noised throughout the land the inhabitants of Buda-Pesth became frequent drinkers of it; they bathed in it also, and many derived much benefit. It consequence a bath-house and pump-room were erected, and a few rooms provided for those who desired to pursue the treatment on the spot. Medical men all over the Continent soon learned the medicinal value of this water and prescribed it to their patients; thus a demand sprang up for it, and searches were made for other places where it might be obtained. Several other wells yielded bitter water; but many wells were sunk in vain, and much money was wasted in attempts to find it where Nature had not been generous. As in the case of the petroleum wells in the State of Pennsylvania and the Province of Ontario, so was it in this one. For one petroleum spring which yielded a fortune, two absorbed capital. Now, however, the limits of the bitter water yielding ground have been determined, so that no one thinks of wasting time and losing money by seeking for it outside a particular area.

At present about forty wells yield bitter water, and seven persons or companies are their proprietors, and superintend the bottling and sending of it to market. The one first discovered is nearest the city; the one best known in England is the furthest from it. This belongs to Herr Andreas Saxlehner, and bears the name of Hunyadi János. If not actually introduced into England by the company which supplies Apollinaris water, this bitter water has been chiefly pushed by that company, which contracted to take a certain number of bottles yearly. The water from one well resembles generally that from another. The differences are in the respective quantities rather than in the nature of the ingredients. In certain cases the bottling is conducted with greater care than in others, and this causes the water to keep longer and in better condition. Some of the wells are decidedly weaker than others. The possessors of the weaker waters cannot help themselves; but those who have several wells can combine the waters of each, and thus produce a good average strength. This is done, I believe, by Herr Saxlehner, who bottles more water than any competitor, and who has several wells on his property. It is with this bitter water as with Völau, the celebrated Austrian wine. The demand for one brand of that wine, called Vöslauer Goldeck, is larger than for any other; yet, though the wine of one year may vary in quality, there is never any appreciable difference between one bottle of Vöslauer and another. This is understood to be arrived at through what is styled "blending." Hungarian bitter water can be, and sometimes is, "blended" also.

Next to the Hunyadi János comes the Rákóczy well, the water from which is stated to be so strong that it bears mixing largely with plain water or milk without detriment to its aperient qualities. The proprietors of this well produce

salt by evaporation which has many of the properties of Carlsbad salt. The proprietors of the Victoria well say that the water from it is stronger still. A curious observation has been made in the locality that a well sunk to the same depth, and in close proximity to a bitter water well, will often yield potable water free from all trace of mineral substances. The explanation doubtless is that all the water at a certain depth is uniform in character and is non-mineralised, but that the water in particular spots derives its mineral constituents from the strata in which it lies or through which it passes. Three other wells may be named. They are—first, Franz Josef; secondly, Hunyadi László; and, thirdly, Esculap. The second belongs to a French, and the third to an English company.

The principal constituents of all these bitter waters are the sulphates of magnesia, soda, and lime, chloride of sodium, and bicarbonate of soda. The percentage of carbonic acid gas is small. It is owing to the large proportion of sulphate of magnesia contained in them that they are called bitter waters, sulphate of magnesia being called "bitter salt" in German. The sulphate of soda and other ingredients cause the Hungarian bitter water to be a pleasanter aperient than Epsom salts and quite as effective. Abernethy had a great dislike to the employment of Epsom salts. He used to compare the effects of taking a dose to the irruption of wild and sanguinary Arabs into a peaceful village. On the other hand, the operation of Hungarian bitter water may be likened to the action of a policeman, directing and compelling obstructionists to move on. The French are fond of, and, it may be presumed, are good judges of aperient medicines, and it is natural, then, that the sale of Hungarian bitter water in France should be very large. All over the Continent the annual consumption is enormous, being relatively far greater than in England, where the water is not yet so well known.

The medicinal action of the bitter water when employed for a bath is said to be marked and useful in cases of gout, rheumatism, diseases of the bowels, nervous diseases, and female complaints.

Visitors to the Queen Elizabeth Salzbad have the opportunity of seeing the whole process of preparing the water for export. They may drink as freely of it as they please, a privilege which, it is understood, they never abuse. There are no secrets, nor is there any affectation of mystery in this establishment. This bitter water is less known in England than others which are extensively advertised; still there is some demand for it. It bears two names, one being "Royal Hungarian Bitter Water," the other "Hunyadi Matthias." In Germany and Austria, where it is known as "Ofner Königsbitterwasser," the sale is large, and a considerable quantity is sent to Italy and America. In France, however, the sale is largest, owing to the Academy of Medicine having pronounced it very good, and to the leading French medical men prescribing it. It is one of the few foreign mineral waters which patriotic Frenchmen drink with satisfaction, and they drink it under the name of "Eau Purgative Hongroise."

COLLAPSE OF THE "NATIONAL SUGARINE REFINING COMPANY."—A company promoter of Boston (U.S.A.) has recently found it advisable to migrate to Canada, after having, it is alleged, swindled a number of Boston capitalists out of between £30,000 and £50,000. "Sugarine" was his commodity—an article, he claimed, which was destined to take the place of sugar for manufacturing purposes. It could be made from common laundry starch, by means of a secret formula which he had in his possession, for 1½c. a pound, and readily be sold at 5½c. a pound. There was practically no limit to the demand. In January he incorporated the National Sugarine Refining Company, and a charter was granted. The capital stock of the company was placed at £10,000 and the number of shares at 100. A loft was hired and the work of manufacturing sugarine was begun. His entire milling processes and plant were not worth £1,000, but he started out as though millions were behind him. He sold his product at 5½c. a pound, and it was afterwards discovered that it was nothing more nor less than ordinary cane-sugar, made whiter with a small quantity of cheap starch. Manufacturers of cheap confectionery in the principal Eastern cities had purchased sample lots for trial when the collapse of the company came.

CESYPS AND LANOLIN HISTORICALLY CONSIDERED.

BY DR. N. WULFSBERG (Christiania).

IN THE CHEMIST AND DRUGGIST, April 17, 1886, Mr. F. Gall pointed out that a substance resembling lanolin was described by Culpepper as cesypus, who gave a process for manufacturing it. Dr. Liebreich, in a subsequent issue, stated that he had already called attention to the fact that Ovid, Dioscorides, and other old writers had mentioned wool-fat as a medicament. In a recent issue of the *British Medical Journal* the author enters fully into this subject, chiefly with reference to the use of anhydrous lanolin, which he considers as superior to the best Attic cesypus ever seen by Dioscorides as our modern candles are to the tallow dip of our grandfathers. We find the first complete account of it in Dioscorides (*Materia Medica*, lib. iii. cap. lxvi.). He says that the Greeks gave the name of cesypus to the fat of raw wool. It was prepared in the following manner:—Soft fresh wool, that had not been treated with soap-root (*Gypsophila Struthium*, L.), was washed with warm water, and when its impurities had been pressed out and collected in a wide-mouthed vessel, water was poured on, and the whole was violently beaten with a spoon or stirred with a stick until it foamed. Sea-water was then poured on the foam, which caused the floating fat to settle. It was collected in another earthen basin, and the residue treated as before. This proceeding was repeated until all the fat had separated. The collected wool-fat was kneaded by hand, and any impurities removed; the water was gradually pressed out, and fresh poured on, the kneading being continued until the taste of a small portion laid on the tongue was only slightly astringent, not sharp, and until its appearance was white and fatty; it was then preserved in an earthen vessel. All this was done in burning sunshine. Sometimes the strained fat was washed with cold water and rubbed with the hands so as to make it whiter; or the washed and clean wool was boiled with water over a weak fire in a copper vessel, the floating fat collected and washed with water in the way above described; after straining it was placed with hot water in an earthen vessel in the sun, and covered with a linen cloth until it became white and sufficiently consistent.

Celsus, in his *De Medicina*, mentions the unguent only in connection with other ingredients of *Emplastrum enneapharmacum* and of *Ceratum rosaceum cum asypo*. Galen does not consider cesypus in any way superior to other fats, and consequently devotes little time to it; on the other hand, the elder Pliny gives it more attention, and states that the cesypus of Attic sheep is the best. We then come to a period during which the substance fell practically into disuse, viz. during the middle ages. It was used in France up to the end of the last century, and in England it was mentioned by Culpepper in the seventeenth century, but to what extent it was used then it would be difficult to say. The preparation remained longest in use in Spain, where we find it in the Pharmacopœia down to the end of last century. In the second edition of the *Pharmacopœia Hispanica* (Madrid, 1798), page 70, an cesypus purificatus is described as an oily substance, obtained by washing sheep's wool, cleaned by boiling and straining, and made use of as an emollient, and for external application.

From the beginning of this century until a few years ago cesypus does not appear to have been mentioned at all in connection with medicine, but various chemists, such as Hartmann, Elsner, and Schultze, had studied the composition of wool-fat, and found it to consist of cholesterin bodies and fatty acids. Liebreich's lanolin consists of the cholesterin bodies only. It is noticeable that cesypus was used in the same form as lanolin was introduced, viz. mixed with water, for the "purified" white substance was only obtained by kneading the brown fat along with water. Presumably it was considered that the change to the white colour was due to purification and not to admixture with water. This idea, it is evident, was correctly interpreted by Dr. Liebreich in introducing lanolin.

The author gives preference to the anhydrous variety, and records several cases in which he has used it in combination with other medicaments. He finds an ointment of boric acid (1 in 5) of good service in recurrent eczema. For dry eczema an application consisting of 1 part of tar ointment and 9 parts of lanolin was found to be very useful.

THE PHARMACEUTICAL USES OF THE POLARIMETER.

SEVERAL years ago Dr. Charles Symes, at a meeting of the British Pharmaceutical Conference, drew attention to the use of the polarimeter in pharmacy, more especially for the purpose of detecting adulteration in essential oils. It cannot be said, however, that the instrument is well known to pharmacists. This is owing, no doubt, to its limited applications, and to some uncertainty as to the results which are afforded by it. For example, in a discussion before the Pharmaceutical Conference on the use of the instrument as a means for detecting inferior alkaloids in quinine, it was pointed out that the rotatory power of homoquinine is so similar to that of quinine, that a specimen of the latter alkaloid containing a large proportion of the former might be passed as pure by the polarimetric test. Moreover, when solutions of substances are tested by the polarimetric method, the slightest error in manipulation may result in a large divergence from the truth. In the case of those essential oils which can be obtained by redistillation in a condition of constancy and of unimpaired therapeutic purity, the method is undoubtedly one of the best at our command. We have recently referred (this journal, April 16) to the experiments of Dr. Duffield on oil of peppermint, and we observe that Mr. A. M. Todd is continuing the experiments with the endeavour to ascertain how far oil of camphor is used for adulterating oil of peppermint. We have already stated that camphor oil is dextrogyrate, oil of peppermint being levogyrate. Five samples of the former which Mr. Todd examined polarised on the average +65° (200-mm. column), and the average of five samples of pure oil of peppermint was 50.2°. He has already proved that when oil of peppermint is distilled the specific gravity falls and then rises; but in the case of camphor oil and mixtures of the two oils the specific gravity of the fractions rises from the beginning. When the fractions from the mixture of oils are tested with the polarimeter, it is found that their rotatory power commences with divergence to the right (due to the camphor oil), and gradually diminishes until the peppermint products begin to distil in a comparatively pure state, when the fractions become levogyrate.

The author finds that by removing 10 per cent. of menthol from the oil, the angle of polarisation was lessened by three degrees on the 200-mm. column; and when menthol is added to peppermint oil (although melted menthol does not itself affect the polarised ray) the angle of polarisation is increased. The highest polarising point was obtained with a pure oil distilled from plants which had been dry for six months. This oil polarised -74°.

The one sample of oil of peppermint regarding which the author is not satisfied on account of its polarisation was grown in Kalamazoo county, Michigan. It polarised at -29°. Whether this is due to peculiar soil, or some subtle adulteration, is yet to be investigated. Among other notable results was the test of an oil marked "German," polarising at -14°, heavily adulterated with oil of pennyroyal and "Japanese peppermint" (*Mentha arvensis*). Another was the brand "Michigan county oil peppermint," to which we have formerly referred, showing by fractional distillation 50 per cent. oil of turpentine, and which polarised at -5°.

COFFEE AS A DEODORANT OF IODOFORM.

VALUABLE as coffee, when freshly ground, has proved in disguising the odour of iodoform, it has the following disadvantages. (1) It is only for a limited period that its effects last; and (2) it is very difficult to grind the coffee so fine as to prevent the grains irritating a sore part; and especially is this felt if the iodoform be used in the form of an ointment. Dr. Richard Neale has found (*Brit. Med. Journ.*) that by macerating the coffee in hot lard or vaseline, all the deodorising powers are absorbed by and retained in the vehicle employed, and a perfectly smooth, inodorous, and unirritating ointment can be prepared. We find that the most suitable plan is to digest 4 oz. of freshly roasted and ground coffee for twelve hours in a pound of the fat, heated to slightly above the melting-point; at the end of this time strain and stir until cold. The vehicle disguises the iodoform odour for a considerable time, and much better than any other deodorant we have tried. As in other cases, however, the iodoform asserts itself in the long run.

Trade Notes.

MR. H. W. PERRY has sold his business at Henley-on-Thames to Mr. Charles James Batchelor.

It will be noted that Messrs. Fletcher, Fletcher & Stevenson, of Holloway, offer, by advertisement, to send a sample of their "Liquor Cinchona de Vrij" free to any pharmacist who may apply for it.

MESSRS. JOHNSON & JOHNSON, plaster-makers, of New York, have commenced to do business in this country, and their price-list will be found among the advertisements of this issue. The representative of the firm is at present in London, and Messrs. Barclay & Sons, of Farringdon Street, hold stock of all the products of the firm. Special attention may be directed to some elegant and novel styles of court plaster in aluminium and celluloid cases, for the waistcoat pocket, which are offered by this firm.

MARRIAGES.

[*Notices of Marriages and Deaths are inserted free if sent with proper authentication.*]

BARNES—WILLIAMSON.—At St. Andrew's Cathedral, Honolulu, Hawaiian Isles, April 21, by the Right Rev. the Lord Bishop of the diocese, assisted by the Rev. Herbert F. E. Whalley, S.A.C., the Rev. W. H. Barnes, S.A.C., of Lahaina Mani, to Emily Elizabeth Scott (Bessie), eldest daughter of William Henry Williamson, Esq., of Elizabeth Street, Cheetham, Manchester.

CATON—DYSON.—On June 7, at Christ Church, Ealing, by the Rev. J. S. Hilliard, M.A., Vicar, assisted by the Rev. M. E. Ruston, M.A., brother-in-law of the bride, Erasmus Stanley Caton, of Beckenham and Gracechurch Street, E.C., younger son of Thomas Caton, Blackheath, to Kate Marian, third daughter of W. B. Dyson, pharmaceutical chemist, of Ealing and Gloucester Road, South Kensington, S.W.

MAXTON—THOMARSON.—At the First U.P. Church, Kelso, on June 2, by the Rev. Thomas Craufurd Kirkwood, assisted by the Rev. D. Y. Currie, Peebles, William Murray Maxton, chemist and druggist, Kelso, to Emily Thomarson, formerly of Carlisle.

DEATHS.

JOHNSON.—On June 2, Mr. John Borwell Johnson, pharmaceutical chemist, Uttoxeter.

ROCKE.—By the last mail from Australia we receive the following particulars of the tragic death of Mr. Rocke at Sydney, which was reported by cablegram in this journal of May 14. Mr. Herbert Rocke, member of the firm of Rocke, Tompsett & Co., wholesale druggists, Melbourne and London, was found dead in the courtyard of Petty's Hotel, Sydney, on May 11, under distressing circumstances. He had just returned *via* San Francisco from a rather long visit to England. He landed from the ss. *Alameda* on May 5. He wrote to his firm in good spirits, stating that he was not feeling quite well, but would stay in New South Wales for a day or two. He took rooms at Petty's Hotel, Sydney, left for a few days' visit to Mount Victoria, and then returned to Sydney. On the evening of May 10 he was in conversation with his wife and a lady friend till about 9.40 P.M. He had given up his bed to this lady, and retired to another room. Early the next morning he was found in the courtyard in his nightdress. Dr. Garnett was at once called, and found that his skull was fractured and he was quite dead. An inquest was held at Sydney on May 11, when an open verdict was returned. The deceased gentleman was well known and much respected in pharmaceutical circles, both in London and Australia. He was 41 years of age, but looked younger. He leaves a wife and five children. The firm with which he was connected was founded about ten years ago, and holds a leading position in Melbourne. Mr. Rocke was for some years a member of the Pharmacy Board of Victoria, the body empowered to grant pharmaceutical certificates and to prosecute offenders against the Pharmacy and Sale of Poisons

Acts. His partner, Mr. H. T. Tompsett, now holds a similar position. The body was conveyed to Melbourne and was buried this afternoon (May 13) in the Kew Cemetery. The funeral was attended by a large number of gentlemen.

TELFER.—On June 1, Mr. Henry Vaughan Telfer, chemist and druggist, Bruton, Somersetshire. Aged 45.

WITTSTEIN.—On June 1 Professor Georg Christian Wittstein, one of the foremost German pharmacists, died at Munich, at the age of seventy-seven years. Mr. Wittstein was a native of Münden, in Hanover, in which town his father was engaged as a teacher of mathematics. At the age of fourteen young Wittstein became an apprentice in a pharmacy in his native town, and subsequently passed his pharmaceutical examinations with considerable distinction at the age of twenty-one. He then migrated to Munich, and afterwards became assistant in the pharmaceutical institute of the University, then under the direction of Dr. J. A. Buchner. This assistantship Mr. Wittstein filled for many years, combining with it the technical management of Mr. Buchner's private chemical laboratory. From 1851 to 1853 he filled the professorship of chemistry, technology, and natural history in the town of Anspach, but in the latter year he returned to Munich, where he has since lived. Until 1879, when he finally retired from active life, Mr. Wittstein conducted a private school of chemistry, and it is during the period when he was so engaged that most of the treatises and books on chemical and pharmaceutical subjects by which he has become so well known in this country were written. Mr. Wittstein's principal works were a manual for the preparation and examination of chemical and pharmaceutical preparations, originally published in 1844, and translated into English by Mr. S. Darby; an etymological-botanical dictionary; a handbook on chemistry (1852); a guide to the organic analysis of plants and parts of plants, translated into English in 1878 by Baron Ferdinand von Mueller; and a dictionary of vegetable pharmacognosy. In addition to the above-mentioned works Mr. Wittstein was the author of numerous scientific pamphlets and treatises of a popular character, and had achieved a considerable reputation in his own country as a determined enemy of worthless proprietary preparations, of which he analysed and exposed not a few.

A PRIZE FOR CHEMISTS.—The Amsterdam Association opposed to the adulteration of butter has offered a prize of 1,000 florins to the discoverer of the best method for immediately detecting foreign matters added to butter. The process must trace out any sort of fat that may have been introduced, whether it is harmful or not. The process is to be simple and practical enough to be worked without a chemical laboratory. Memoirs should be sent before January 1, 1888, to Mr. J. Binkes-Borgers, at Leyden. The prizetaker will be allowed to keep his copyright, and may take out patents in foreign countries.

MANUFACTURE OF ARTIFICIAL EYES.—An American author thus describes the process of making glass eyes, as witnessed in a shop at Venice:—"Two small glass tubes, one held in each hand, are turned and twisted in a very hot flame. When at the proper temperature, the operator blows into one of the tubes, and forms a ball at the end the size of a plum, which ball is ultimately to be the eye. The other tube, a coloured glass, is used in making the coloured part of the eye. It is heated to the proper temperature, and incorporated in the ball of white glass at the spot where the pupil is to be. This done, and the white of the eye having assumed the proper creamy colour, the delicate feat of making the veins is performed. In doing this, heated tubes of red-streaked glass are drawn very deftly over the white surface, leaving tiny reddish streaks behind—the veins. Common glass eyes, such as are made for hospitals, require but a short time to manufacture, and cost about 8s. But a fashionable young lady has half-a-dozen eyes made before she is satisfied, and some fastidious people are more particular with their night than with their day eyes. A different eye is worn at night, as the pupil is much smaller in daytime than at night, and a fashionable woman would not think of entering a ball-room with the pupils of her eyes of different sizes. Distant customers sometimes have an artist paint a portrait of the eye, that the maker of the glass eye may study it."

The Chemists and Druggists' Trade Association of Great Britain.

A SPECIAL general meeting of the members of this Association was held at the Inns of Court Hotel, Lincoln's Inn Fields, London, yesterday (Friday), to consider the expediency of winding-up the Association. There was a very poor attendance, only forty-one persons being present in all, including more than a dozen members of the executive committee, together with representatives of the press. Mr. W. G. Cross, President of the Association, took the chair a little after the hour named in the notice.

The CHAIRMAN, at the commencement of the proceedings, said that he could not open such a meeting without feeling some regret that it was necessary. The Association was formed for representing the chemists and druggists throughout Great Britain, and it was unfortunate for the trade that it should now be necessary to consider the advisability of winding it up. Before the foundation of the Association the Pharmaceutical Society was considered to be for a few, and many people refused to join it, therefore the Chemists and Druggists' Association was formed, and a large measure of success had attended their efforts. It might be that there were still years of prosperity before the Association, but he had a notice that two past presidents of the Association were ready with a resolution in the opposite direction. He thought they would all agree that the need for such an Association was as great as ever it was, and that it should be allowed to slip out of existence seemed a pity; but it had better slip out of existence unless, in the first place, it was representative of those it professed to serve (and it was no use offering services if they were not accepted); and secondly, unless funds were provided to carry on the Association. They did not want to be continually obliged to make appeals for funds, but they wanted to go forward as a real power, or not go forward at all. The true essential conditions to going on were that they should be representative and solvent. He was prepared to be quite impartial in the matter, and he hoped that the discussion would not be limited to the members of the trade present, but would make itself felt by the chemists and druggists throughout the country. He then declared the meeting open.

Mr. BARCLAY proposed:—

That the Chemists and Druggists' Trade Association of Great Britain be forthwith wound up, and that the Finance Committee be directed to take all necessary steps to the end.

That the Treasurer be directed to hand over the surplus funds—if any remained in his hands after satisfying all the liabilities of the Association—to the Benevolent Fund of the Pharmaceutical Society, and a copy of this resolution be forwarded to the Secretary of the Pharmaceutical Society.

He said that the Executive Committee would find it impossible to carry on the work of the Association vigorously unless they had an income of at least 1,000*l.* a year. For some time past the executive had been afraid that events might arise which would require a large expenditure of money, and that their Association, which professed to represent the trade, would be obliged to allow judgment to go against them by default because they had not funds to undertake a proper defence. They had been living a hand-to-mouth existence for some time, and there was a clear note sounded in the trade that they must have a thousand pounds a year as a minimum to do the work expected from them. An appeal had been made to the trade which had resulted in 1,400 gentlemen coming forward as subscribers, and at the last meeting of the executive he opposed a resolution to wind up the Association, but he was outvoted, though by the narrow majority of 7 to 6. The announcement had gone forth that this meeting was to be held, and it was expected that a large number of additional promises would have come in if the trade desired the Association should be maintained. He was sorry to say that the number which had come in from that time to this was only 26. It would appear, therefore, that the trade did not desire a trade organisation. Mr. Barclay then went on to narrate what the Association had done. They had taken steps to protect the trade in

emergencies, and they had done good work which would be of everlasting benefit to the trade. Before the Association had been long in existence, they had to defend some of their brethren attacked under the Adulteration Act. Soon afterwards they had to defend in still more important attacks made upon them by the Apothecaries' Society. They had also done a large amount of good for the trade by approaching Government departments and protecting vested interests, and the work they had done in these matters would not be lost to the trade. Through the efforts made by the Association the Board of Trade had been induced to issue a circular which removed a great many difficulties about weights and measures when it became necessary that druggists' weights should be stamped. The Association had also done good work with the Board of Inland Revenue by obtaining from the Board a memorandum explaining the very difficult Act in regard to patent medicines stamps. When Lord George Hamilton introduced the Medical Acts Amendment Bill, which contained a clause to stop counter-prescribing, the Association took steps to oppose the Bill; and partly through their efforts the Bill was dropped. The Association had also protected the interests of the trade with respect to the Dentists' Act and the Trade Marks Act, but with the latter the Association had not been able to do all they had wished for want of funds, and a great many trade-marks had been registered to the detriment of the trade. During the last eleven years the Association had spent 3,000*l.* in law, and not a penny of that had been wasted; it had all been spent for the benefit of the trade. If the Association were allowed to die, it would be very difficult to start another. The Editor of THE CHEMIST AND DRUGGIST, in speaking of the work of the Association, used these words, which he would read to them: "To a great extent the paradox is true that the completeness of its success has ruined it. As a militant body it has accomplished no mean share of the rough work of pharmacy during the past ten years, and in a limited degree it is true that it has nearly collapsed because it has for the time pretty well cleared the field of enemies. It has won the respect of its foes, even if it has failed to secure the permanent support of its friends." That showed how much the Association was respected, and he might also mention that the *Pharmaceutical Journal*, referring to the same matter, said that it appeared that there was need for an association which would look after the commercial interests of chemists, but that the measure of support which was given to the Trade Association indicated that it would be unwise for any other body to attempt that work. Mr. Barclay went on to urge that the conduct of the stores and companies in interfering with the chemists' trade was getting so serious that he believed the latter would have the sympathy of the public in any attempt to prevent such competition. But they on their part must do something, too. They must shut up their branch shops conducted by unqualified assistants; must limit the executor's clause, and, in fact, must make their trade a more personal one. At present, however, he felt they must wind up this Association, and no doubt the good work of the Association would be felt after it had passed out of existence, and very likely the death of this organisation would result in a stronger and more powerful and more representative Association coming into existence, and if such were the case he should be very happy to further such an Association. (Cheers.)

MR. JOHN HARRISON (Sunderland), in seconding the resolution, said that Mr. Barclay had made the matter so very clear to the meeting that there was little for him to say. He felt that they did not require to show the necessity for the Association; that necessity was as great as ever, but the experience of the executive was that chemists and druggists did not appreciate the fact, for the membership of the Association and the funds had greatly fallen off. There were two alternatives before the executive—a large increase in the number of members, or the subscriptions should be increased. At various times special efforts had been made to create greater interest in the work of the Association, but they had failed. To the last appeal 1,400 gentlemen had replied, who were willing to subscribe 10*s.*; that would give them 700*l.* a year, and in a certain sense it seemed hopeful. But they should recollect that after the first year there would be a shrinkage—indeed, he felt that after the first year the falling-off would be so great that it would be found

impossible to carry on the work. It was a common experience that the voluntary principle was at a discount at the present time, and it was therefore with some surprise that he had observed a letter from a gentleman of wide business experience recommending that the work of the Association should be more largely voluntary. But he thought that this would not prevent the breaking up. They suffered because no danger was imminent—they had done their work too well, and they could not get the trade to come forward in sufficient numbers to give life to the Association unless the analysts and such other harassing influences to the chemist began to pester them. After considering everything, he came to the conclusion that it was impossible to go on, and after mature deliberation Mr. Barclay had also come to this conclusion. He regretted this very much, but he was comforted by the thought that before long, should danger to their interests arise, chemists would rise up and form a strong association. (Applause.)

Mr. WYLEY (Coventry) said that he rose to submit an amendment, and he wished in the first place to express his appreciation of the work of the executive. It was perfectly evident in looking over the records of the Association that the success of the Association was largely due to the executive. He felt, however, that the bad times had something to do with its present condition, and in this opinion he wrote a letter to THE CHEMIST AND DRUGGIST suggesting that more of the work of the Association should be of a voluntary character. He was sure that there were dozens of chemists who would give a considerable portion of their time to the work, and thereby keep down the expenses. After referring to the work which the secretary had done, Mr. WYLEY pointed out that the amount charged for secretarial expenses, &c., was over 400*l.* a year, which he considered more than was necessary, and that the work could be done by an honorary secretary, assisted by a thoroughly organised staff of local secretaries, each of whom would be willing to work, and to collect information and money. There was a feeling abroad that the Association was doomed. (Hear, hear.) He was sorry for this, because once they lost heart they were in a fair way to collapse. He would urge upon everyone not to let the Association go down, for it would take a long time, and be a much more difficult matter, to start a new one. He again urged that less should be spent on the management of the Association, that there should be a smaller executive body. He was aware that a large amount of work at present fell to the Committee, and he fully appreciated the service, but he believed that the Urgency Committee did the bulk of the work, and that seemed to show that a smaller executive would do. Speaking on the small measure of support which had come in in response to the repeated appeals, he said that, if chemists were sure that they would be defended in all cases short of fraud, they would give the Association their hearty support; and with this conviction he begged to move as an amendment:—

That six members of the executive and six members elected from the general meeting to-day, be appointed as a committee, with the view of reorganising the Association upon a more economic basis.

He trusted that the result would be the continued and ensured success of the Association. (Applause.)

Mr. MACKENZIE (Edinburgh) seconded the amendment. He was convinced, the longer he thought of the matter, that the Association should still exist, and if Mr. Wyley had not proposed this amendment he would have moved that a committee composed of five English and one Scotch representative should be appointed to consider how the Association could be continued. They had heard of a city which had been spared for five's sake—surely they should spare the Association for the sake of 1,400. (Hear, hear, and laughter.) His great objection to winding up the Association was that they would break the continuity by so doing, and he did not think that with the continuity broken the chemists and druggists would be prepared to repel attacks when they were made. They ought to continue the Association, if only for the sake of having a nucleus of defence. Perhaps it might be desirable to cut down expenses; certainly if the funds were insufficient the executive should be reduced in number. His only objection to that was that it ceased to be fully representative; but he would waive that objection if by so doing the Association would not be

strangled, and in concluding expressed his conviction that if that happened the bad times which everybody now complained of would be a good deal worse.

The PRESIDENT intervened to state in reference to Mr. Wyley's argument in respect to voluntary work that the honorary secretary (Mr. Arblaster) and the honorary treasurer (Mr. Holdsworth) had intimated their intention to resign, even if the Association were reorganised.

Mr. LONG would have moved an amendment similar to the one before the meeting if Mr. Wyley had not done so. He had been on the stump in his own neighbourhood, and had got half of the chemists thereabouts to promise to continue their subscriptions. They should not acknowledge defeat, but he fully believed they could resuscitate the Association on a stronger basis than heretofore. But they must do something more than send circulars. The apathy of the trade was disgusting. When he called on chemists some of them asked what the Association had done. He asked them what had they done themselves. Some of them said they could not afford it. He told them it was a penny a week. Another said if we could stop the stores dispensing he would subscribe. Never was there a more rotten judgment than that which had been given in the stores trial. If the proprietors of the stores could not be examined, as was said by the Lord Chancellor, then their carrying on business was a legal conspiracy.

Mr. CLARK said he felt very earnestly the necessity for continuing the Association, and he fully believed that if the trade were again canvassed they would get such a response as they did not expect. He hoped that a final effort would be made. The Society had a high prestige and eleven years' experience, and an exceptionally able secretary, and he did not think that any private enterprise could properly take its place.

Mr. ALLEN said the resolution before the meeting really meant that, if passed, the Association would die from that moment. But the remarkable thing about it was that every word spoken by Messrs. Barclay and Harrison—two past presidents of the Society—was strongly in favour of the maintenance of the Association. If they had been speaking in favour of the amendment they could not have more effectively advocated it. He could quite understand that the executive committee, finding in that meeting such a small response to their appeal, should feel somewhat dispirited; but with the backing of 1,400 promises he did not think they should discontinue their work, though perhaps they could not carry it on on the same lines as at present.

Mr. HAMPSON, in supporting the amendment, remarked that the voting at the Executive meeting had been very narrow in favour of winding up the Association, there being seven for and six against. He thought the Association would still live if they were in earnest. The wholesale trade had been their friends in the past, and he was sure they would be in the future, and he thought the 1,000*l.* could be obtained. He would not yet believe that they could not raise the money, and with it he was convinced that they were morally bound to go on.

Mr. HART opposed the resolution to wind up the Association, and he felt the trade would make a great mistake to allow the Association to die.

Mr. GLOVER supported the amendment, and emphasised his support by relating to the meeting how he had been threatened by the Apothecaries' Society for a simple case of counter prescribing. He proceeded to read a closely-written manuscript, from which it appeared that through being a member of the Association he consulted the secretary regarding the prosecution which the Apothecaries threatened him with; he received advice in due course, and, acting upon it, he succeeded in quashing the case against him. At this stage of his speech, Mr. Glover was interrupted by various members, who protested that the case was not relevant to the matter under discussion. Mr. Glover assured the members that it was, for it proved how important it was that the Association should be kept up; his statement was not long, but if they would not listen to it, probably they would see it in THE CHEMIST AND DRUGGIST. After further protests, the Chairman said that he must, in respect for the time of the meeting, rule Mr. Glover out of order.

Mr. JONES (Llanrwst), in supporting the amendment said he had fought hard to carry on the Association, but it could not be done without funds. If the Association was to be

carried on he should be happy to help in canvassing. With a smaller executive, and with the expenses cut down they could carry on the Association. He was sure if it went out of existence the chemists would be harassed, and he therefore would give his cordial support to the amendment.

Mr. ANDREWS supported the amendment, and hoped the meeting would understand that it was to the effect that six members of the executive and six of the members of the Association should meet to decide how the Association could be carried on with more voluntary work and less expense.

The CHAIRMAN asked to be allowed to take a small part in the discussion, and assured the meeting that it had been pleasant to hear that so little blame had been attached to the executive; but he felt that the amendment before the meeting was impracticable, and he felt that the small attendance at that meeting showed the apathy of the trade. They had raised sufficient money from time to time, but it was by a tremendous effort, and he asked them if they could honestly be said to represent the trade, when they lived on such ephemeral support. When the trade felt the need, he thought they would again form a representative association. He contended that the gentlemen who had spoken to the amendment had actually adduced arguments for the resolution, because what they recommended had been tried again and again.

Mr. SMITH pointed out that the circular asking for support followed closely on one asking for 2s. 6d., and it was intimated that the Association was in a dying condition. For these reasons he considered it did not meet with the response it would otherwise have done.

Mr. WALKER thought it should not go forward that the executive wished to wind up the Association, but it should be said that, after trying every possible remedy, the executive felt no other course was open to them. The gentlemen who advocated the amendment were entering upon a very difficult task, which he hoped they would carry through, but he could not believe that they would succeed.

Mr. SYMES said that, notwithstanding the good wishes expressed at the meeting, he thought they had evidence in the small number present that it was not practicable to carry on the work of the Association. The existence of the Association was not merely a question of amount, it was a question of numerical strength. (Hear, hear.) He had no doubt a personal effort would bring in a larger number of members; but he thought the gentlemen who had volunteered to canvass would in time grow tired, as others had who had before tried the same course. If the Association was wound up, he was sure its influence would survive it, and in support of this opinion he mentioned the fact that the trade-mark authorities had told him how much they were indebted to the Association at Birmingham.

Mr. BARCLAY, in replying on the discussion, admitted that he was earnestly anxious that the Association should continue, for he felt that unless it was done the trade would suffer very much, but all the various suggestions which had been put forward by the supporters of the amendment for making the Association more vigorous and increasing the funds had been thought out by the executive long ago. It was impossible to get an honorary secretary to do the work of the Association, and the expenses could not be reduced if they were to go on with the work of protecting the interests of the trade in a satisfactory manner. He was sure every item on the balance-sheet could be defcnded. But still he should be only too glad to see both the amendment and his resolution dropped, and the whole matter allowed to lapse for a month. [Mr. Long : "Over the Jubilee," and laughter.] Yes, he thought it was a very happy suggestion to let the matter rest, and then make a Jubilee appeal. (Hear, hear; and laughter.) He should be glad if that could be done, and let it go as from that meeting, or if they liked let a resolution be passed saying, in the name of the meeting, that it would be a disaster to the trade if the organisation should fall, and then the local secretaries should be earnestly and specially requested to canvass and send in within the month a list of members who would pay 10s. 6d. a year in the event of the Association going on. But the question was asked, what were they to do in the meantime for money? [A voice : "The meeting guarantees it," and cheers.] Well, that was all right. If the meeting was of opinion that the Association should go on, and would send out such a manifesto as he had suggested, then he felt as-

sured that the Association would go on, and would go on more vigorously than in the past. (Hear, hear.) If the amendment and resolution were withdrawn, and the meeting would agree to adjourn for a month, and request that in the meantime the local secretaries throughout the country should canvass for subscriptions, and make the 1,400 promised subscriptions up to 2,000, he felt that they would be justified in continuing the Association. (Cheers.)

Mr. MACKENZIE pointed out that they could not override the rules of the Association, which provided that the subscription should be 5s. This was a bar to raising the subscription to half a guinea.

Mr. HARRISON declined to agree to the withdrawal of the resolution which he had seconded. All that had been suggested had already been done by the executive. They might take it for granted that all the men who were in earnest in desiring that the organisation of the Association should be retained were included in the 1,400 who had sent in their signatures. The fewness of the chemists who came to the meeting was another proof of indifference, and he could not see that it was practicable for them to go on with the work under present circumstances.

At this stage several members said that they could not adjourn for a month; and, Mr. Hampson having threatened to move another amendment, several said that that would not be in order. Replying to the malcontents,

The CHAIRMAN then put the amndment proposed by Mr. Wyley, which was carried by 23 votes to 6, and it became the substantive motion.

The SOLICITOR said the meeting was called to consider the expediency of winding up the Association, "or to take what action it might think fit." Therefore the meeting was perfectly at liberty to adjourn for a month. (Hear, hear.)

Several members rose to oppose the amendment, the resolution being withdrawn.

Mr. HAMPSON next proposed as an amendment :—

That this Association, with a subscription of half a guinea per annum be carried on for twelve months, and that the Executive Committee be requested to continue their efforts to sustain it.

He said he thought such a resolution would leave the executive with perfectly free hands.

Mr. ALLEN seconded the amendment.

Mr. MALTBY, in supporting the last proposal, said they were now at liberty to go on canvassing, and therefore he hoped that those gentlemen who desired to carry on the Association would give a hearty support to the amendment.

Mr. Hampson's amendment, on being put to the vote, was declared carried by a large majority.

The CHAIRMAN then put the amendment as a substantive motion, when it was carried unanimously.

Mr. HAMPSON having exhorted those present to do their utmost to further the resolution,

The meeting terminated with a vote of thanks to the Chairman.

SPANISH PRIZES FOR SCIENTISTS.—The Academy of Sciences of Catalonia has selected the following subjects for the prizes to be awarded in 1887. *Surgery*, on tuberculosis of the bones, lesions, and treatment. *Hygience*, on the danger to the people caused by the falsification of wines, and the means to prevent it. *Medicine*, on fibrinous pneumonia—is the malady caused by a parasite, and is it contagious? *Pharmacy*, on glycerine, a study of its chemical properties and pharmaceutical applications. Memoirs must be sent in before October 1 next.

TRADE WITH SPAIN.—A maritime exhibition will be held at Cadiz, Spain, from August 15 to October 31 of this year. The exposition is to be a purely national one, but a grand bazaar will be opened in the building, with about 40 counters, for the sale of foreign articles of all sorts. Those wishing to hire one of the counters should apply to the directing committee of the exposition before June 30, stating explicitly the sort of goods to be offered for sale, and entering into an agreement to pay, as rent, 15 francs a day for each counter, payable monthly in advance. Foreign goods will be admitted temporarily free of duty, on condition that they shall be re-exported within three months from the date of closing the exhibition.

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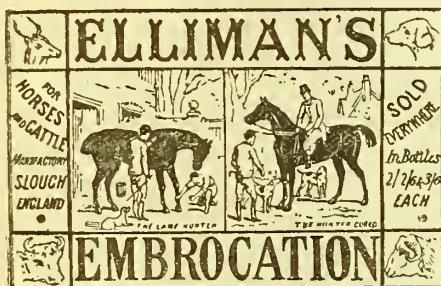
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THE TRADE ASSOCIATION REVIVING.

The meeting of the Chemists and Druggists' Trade Association held in London yesterday (Friday) came to an unexpected decision. The logic of facts, the practical indifference of the trade, and the continually recurring exhaustion of funds, which have to be recruited by appeals to persons and firms not directly benefited by the work of the Association, have convinced most observers that the organisation has for the present worn itself out. No one would admit more readily than ourselves the excellence of the services it has rendered, and the gains accomplished, and these, as was several times stated at the meeting, will remain with the trade. But it is not possible to ignore the fact which has forced itself on the attention of the Executive Committee, that the support now attainable is no longer such as will enable the Association to do any work at all. It will go very little beyond paying rents, salaries, and travelling expenses. This consideration induced the Executive Committee a month since to call a meeting for the purpose of winding up the Association. Mr. Barclay, naturally reluctant to part with an offspring for which he has worked with so much generosity, held out against the death sentence longer than most of his colleagues; but he seemed to have become convinced that it was useless to struggle on, for it was he who rose first to move the fatal resolution. Mr. Harrison seconded the motion, and the President evidently supported it. These were the three members of the Executive whose labours for the Association's welfare were perhaps as great as all the rest of the Committee had given. The weight of their opinion could not be ignored. But more forcible even than their arguments or advice was the evidence of the meeting in face of them. The announcement that the Association which is declared to be of such necessity to the trade was about to break up had not attracted more than about a score of chemists. The remaining ten thousand evidently acquiesced with something more or less than resignation in the decree of fate. That from such materials anything approaching the necessary enthusiasm can be evolved seems as hopeless a task as can well be conceived. But it is to be attempted. It cannot be said, however, that there was any common ground among those who opposed the original motion. Mr. Wyley recommends more economy and the greater utilisation of honorary services. That is an intelligible contention, though we do not believe it to be practicable. The hard work of such an Association as this must be paid for, and, as Mr. Barclay afterwards showed, there is no evidence of extravagance. Others supported the amendments on the ground that they hoped for work which could not be attempted on less than ten times the income that the Association has ever had. Mr. Long, would contest the "rotten judgment" of the various Courts in the land who decided the companies question. Several people want to put down the stores. Mr. Allen wants to continue the costly trademarks contests, which brought the Association to the verge of ruin before; and so forth. The arguments used were, however, congenial to Mr. Barclay, and he abandoned the resolution he had moved with an alacrity which ensured the success of the amendment, but which was not shared by his less impulsive colleagues. The discussion came to an end, therefore, with a unanimous vote to the effect that the Association should be continued. This was what a meeting of less than forty chemists decided, though how their resolve is to be carried into effect nobody knows.

QUEEN VICTORIA AND THE DRUG TRADE.

WHILE every public print is teeming with Jubilee paragraphs, and with the evidence of Jubilee preparations on every side of us, it is impossible to avoid a retrospective glance at the occupation which it is the duty of this journal to represent. And in considering the history of the past fifty years as it relates to pharmacy, the question so often put, whether we are advancing or retrograding, forces itself on our attention. This problem is capable of being considered from various points of view, and it is certain that different observers have come to diametrically opposite conclusions in regard to it. Few, we suppose, would doubt that the art of pharmacy, like pharmacology and therapeutics, with all other branches of the science, and practice of medicine, has prospered and improved; the point on which differences of opinion would be most likely to arise would be concerning pharmacy as a trade, its profits and its pleasures.

When Queen Victoria began to reign a great many of our modern substantial chemists and druggists were beginning their apprenticeship. We have all heard their stories of the hard work they had to do, their long hours, their many discomforts, and the perseverance with which they surmounted the difficulties they met with. We have no doubt of the absolute correctness of all these statements. Fifty years ago chemists and druggists, and most other men, did work harder than they do now, while holidays and all kinds of recreation were infinitely rarer than at present. In these respects modern days, we believe, show a great improvement. The world was never meant to be such a miserable place as men made of it with their seven-years' apprenticeships and their long periods of monotonous, unrelieved toil. At that time there were no doubt a limited number of drug houses of high and well-deserved reputation. The principals were men of the strictest integrity, and the fame of some of these has come down to our day. But, if all accounts are true, these men were exceptions; the multitude were by no means notable for their conscientiousness. There was no Sale of Food and Drugs Act in those days, and the long-suffering public got as much of the genuine article as it suited the traders to give. The "compound powders" of fifty years ago are famous even to this day.

There was no legal restriction of the sale of poisons in 1837, the first move in that direction having been the Arsenic Act of 1851. In that Act the power to sell arsenic was not limited to any special class, for the reason that no definition or register of chemists and druggists was in existence. The compilation of a register of the craft, and the power to insist on qualifications for admission to that register, have been the actual tangible results of the long labours of the Pharmaceutical Society. The whole history of this association, so far as it has yet gone, is comprised in Queen Victoria's reign. The origin of the Society has been so often told that it is not necessary to refer to it now in detail. The circumstance which induced chemists to combine was the introduction by a Mr. Hawes of a medical Bill into Parliament in 1841, the intention of which, as it stood when first printed, was to rule the trade through the medical profession, without giving them any representation on the governing body. It is very likely that with skilful policy good terms might have been secured. Mr. Hawes himself aimed to make a register of the trade, and to ensure certain qualifications. By working with him instead of against him it is not unlikely that the work which the Society sought so long to accomplish, and the result which they did at last attain to in 1868, might have been expedited by at least a quarter of a century. They

chose, however, rather to oppose Mr. Hawes's Bill, which appears to have been at last ignominiously defeated, not by the druggists, but by a "count out." The Bill had, however, served to bring the chemists together, and when they had disposed of the special work in hand they resolved to maintain their union by forming the Pharmaceutical Society of Great Britain. At this time it may be of interest to repeat the names of the gentlemen who at the meeting at the Crown and Anchor in the Strand on April 15, 1841, when the first members were enrolled, were appointed to serve as a committee. These, we may take it, were the notable names in British pharmacy about the date of the Queen's accession, as far as London could furnish them. They were:—

Allen, William, F.R.S., Plough Court; Alsop, Robert, 15 Sloane Square, Chelsea; Barron, Charles, 6 Giltspur Street; Barry, John T., Plough Court; Battley, Richard, 32 Lower Whitecross Street; Baxter, George, 144 High Holborn; Bell, Jacob, 338 Oxford Street; Briggs, Edwin, 48 Wigmore Street; Butler, Thomas, 4 Cheapside; Davy, Charles, 100 Upper Thames Street; De Castro, Samuel, 25 Great St. George's Place, Knightsbridge; Dinneford, Charles, 172 New Bond Street; Ellis, John, 225 Upper Thames Street; Farmar, Robert A., 40 Westminster Road; Foulger, Samuel, 133 Ratcliffe Highway; Gifford, Joseph, 104 Strand; Green, Samuel, 1 Harleyford Place, Kensington; Hanbury, Daniel B., Plough Court; Herring, Thomas, 40 Aldersgate Street; Horner, Edward, 20 Bakersbury; Hudson, William B., 27 Haymarket; Ince, William, 31 Southampton Street, Covent Garden; Keating, Thomas, 79 St. Paul's Churchyard; Lescher, J. S., 4 Cripplegate Buildings; Lowe, William, 47 Blackfriars Road; Mayhew, Samuel M., Camberwell Green; Morson, Thomas, 19 Southampton Row; Payne, Charles James, 5 St. Martin's Court; Pigeon, Richard Hotham, 31 Throgmorton Street; Pound, Matthew, 193 Oxford Street; Savory, John, 143 Bond Street; Simkin, Edward, 2 New Cavendish Street, Portland Place; Smith, Joseph, 29 Haymarket; Smith, George W., 125 Lower Thames Street; Squire, Peter, 277 Oxford Street; Stamper, Ralph, 140 Leadenhall Street; Toller, John, 18 Conduit Street; Walker, Thomas, 48 Tooley Street; Waugh, George, 177 Regent Street; Winstanley, Edward, 7 Poultry.

In the analysis of 10,000 prescriptions which we published last year the twelve preparations found to be most frequently prescribed included four which were little known or rarely prescribed in 1837—viz. spirit of chloroform, bromide of potassium, sulphate of quinine, and glycerine. If the complete list is scanned, it is remarkable how many substances new to medicine have been introduced within the last fifty years; and the list reflects in a manner the advancements in medicine and pharmacy during the period. It is not within our province to enter into detail regarding medicine proper. It has been elsewhere stated, on the authority of Mr. Brudenell Carter, that in curative medicine there is not much advance to be proud of from a scientific point of view. Doctors still pour drugs of which they know little into bodies of which, from the point of view of drug action, they know less; and their principal achievement during the last fifty years has been a growing perception of that ignorance, and a reduction of the drugging. But this is a somewhat extreme view of the case. Nearly all that is new in therapeutics is based upon exact pharmacological knowledge, and empiricism is not universal, although it still exists. Whether it be owing to the influence of homœopathy, or to increased knowledge of the action of medicines—and probably both have had an influence—medication is much more exact and simple now than it was fifty years ago. Towards this advancement pharmacy has contributed. In 1837 there was no medium of intercommunication among pharmacists, and it was no doubt largely due to the advent of a pharmaceutical press that pharmacists have been encouraged to take their proper place as critics and improvers of medical processes, and that they have done so much for the introduction of elegant and exact formulas into the national Pharmacopeia.

Palatable syrups of nauseous drugs, and liquid extracts definitely related to the crude drug, are good examples of this advance. The progress in knowledge of the principles

involved in the exhaustion of drugs is enormous. It is now possible, by percolation—a thing unheard of in 1837—and with the superior means of pressure now available, to obtain from most drugs all that is available for medication. Pills, once used only by menials, are now the favourite form of medication, and are compounded with greater regard to the assimilation of their ingredients, as well as exhibited in more elegant form. The introduction of capsules, compressed tablets, lamels, and kindred forms of medication are also to be credited to the Victorian era of pharmacy. Glancing at a few of the special novelties introduced among medicines during the period, we cannot fail to quote first chloroform, which really became a medicine when Sir J. Y. Simpson introduced it as an anaesthetic in 1847. It has been said of it that "short of the discovery of anaesthesia itself, no greater boon has been bestowed on suffering humanity in modern times." Ether was first used in London in 1846, but it was fully twenty years later before nitrous oxide was used. The benefits which have been bestowed by the introduction of these aids to the surgeon are incalculable. But the pharmacist has a more direct interest in the ever-increasing number of bodies which were "new remedies" in 1840, viz. the alkaloids. The most important of these were known before the Victorian era, but they were rarities; all may be said to have been improved from a pharmaceutical point of view, and certainly they have come into common use, within the last forty years. Perhaps more than anything have alkaloids influenced pharmacy by rendering unnecessary a host of old-fashioned galenical preparations. Alkaloids have materially altered the nature of the work at the dispensing counter. Glycerine, now an article of common consumption, was believed by many chemists in the forties to be a dangerous substance if swallowed, but Price's improvements in 1854 changed this idea. The blue pill and black draught dose of the last generation is not quite extinct, but the introduction of the eclectic resinoids has given it a severe shake. Podophyllin, the vegetable mercury, introduced in the British Pharmacopœia, 1864, had been for a number of years previously in use in this country. We owe to the eclectic school of the United States euonymin, iridin, besides many valuable remedies now official. The introduction of chloral as a hypnotic by Dr. Liebreich in 1869 is an event which cannot be passed over. It has had many rivals since, but none which have killed so many people, or done so much good when properly used. The introduction of artificial quinine-substitutes is a matter of quite recent date, but it may safely be said that their existence will be ephemeral. They are serving a purpose: on the one hand they indicate the progress made by chemists during the era in imitating nature, and on the other hand they trace the development of the germ theory of disease. The proper appreciation of this theory led Lister to revive within the last twenty years the antiseptic treatment which had been lost for several centuries. But the methods are now different, and even still are undergoing a process of differentiation. In this connection the use of carbolic acid, salicylic acid, and various bodies of the paraffin series, must be mentioned as innovations of the Victorian era. The list is a long one, however, and space forbids us to do it justice. But it must be patent that whenever new remedies are introduced pharmacists quickly show their ability to deal with them within their own province. So fully is this recognised that the Pharmacopœia of the present day is almost entirely the work of pharmacists in its practical sections, though they are not yet admitted in this country to any official recognition as its joint authors. The accomplishment of the union of the Pharmacopœias of the three sections of the British isles, which was only attained in 1864, had been urgently pressed previous to the

publication of the London Pharmacopœia of 1836. This, too, has been a notable event in the pharmaceutical history of the past fifty years.

Whether the drug trade as a business is better or worse than it was fifty years since can only be conjectured; but there are many data from which we can form a fairly good guess. As we have already intimated, the protection of the title of "chemist and druggist" is quite recent, but it happens, almost paradoxically, that the great invasion of legitimate business by unqualified drug-dealers has been almost coincident with the period of legislative recognition. In the old days there was much more chivalry between tradesmen than there is now; the confines of the various businesses were, as a rule, rigidly respected; competition, if it meant anything like cutting, was a monster of such hideous mien, that it was extremely likely to disgust the very people who were asked to benefit by it; and all round the principle of "live and let live" was in active operation. Nowadays come the great Juggernauts of retail trade, the impersonal stores, the Whiteleys and the Lewises, who have made their fame and their fortunes by crushing out the smaller men, and to whom the ancient landmarks and the old customs are no more barriers than so much stubble. Moreover, in the days which our old men recollect, the prescribing doctors and the dispensing chemists played well into each other's hand, and the unhappy patient had a bad time of it when he got fitted between the two. He was bled in other ways than by leeches and from his veins. Concentrated medicines and elegant pharmacy were unknown, and if they had been known, would have been despised. Physic was prescribed by draughts, nastiness was its most potent recommendation, and the more nauseous it was the more willingly was it paid for. A few dozen draughts a day yielded a handsome profit, even after the abundant commission to Hippocrates was deducted. The old times offer many temptations, but after all we doubt whether pharmacists would make a good bargain by exchanging the present hard times for them. There is abundant evidence that the volume of drugs consumed in this country has increased in a vastly greater proportion than the consumers. The population of the United Kingdom is about 80 per cent. greater than it was fifty years ago; but this is clearly nothing like the development in the physic trade generally. Within the past twenty-five years alone it would be a moderate computation to reckon that the number of wholesale druggists in London has at least doubled. Great houses have grown or have been established besides in all the large towns of the provinces; the old firms have generally extended their premises, the principals live in a style which would have terrified their grandfathers, and, if anything, they have contracted rather than expanded the range of goods in which they deal. Meanwhile, it is by no means certain that the number of distributors—that is, of retail chemists and druggists—has increased at all. We know that since 1868 the number has remained stationary, and it would be easy to show, too, how these have added new and profitable sections to their businesses. They spend more on their shops, on their fittings, on their assistants, on their wives and daughters, and on themselves. On the whole we are inclined to the opinion that the drug trade, as a trade, has improved considerably during the reign of Queen Victoria.

ETIOLOGY AND TREATMENT OF HAY FEVER.

HAY FEVER, like the gout, is supposed to be indicative of high breeding, as it certainly is a proof of relation to the Anglo-Saxon race. Now when the clover blooms and the hay is fit for the scythe some thousands of our countrymen begin

to lead a life of inexpressible misery. Summer is hateful to them, the least glimpse of sunshine is unwelcome, and the sweet odour of the hay-fields is acutely distasteful. Why are the few amongst us so afflicted? This is a question to which Dr. Morrell Mackenzie addressed himself three years ago, and his reply was so much to the point that his monograph has since grown in bulk, and has reached its fourth edition. Hay fever is a minor ill—an infirmity, not a disease. England is its birthplace, the United States its chosen home; but there it is in season when the leaves are completing their functions and the Roman wormwood begins to bloom, that is from August to September. With us the infirmity shows itself about the present time, and continues for six weeks or thereabouts. As far as we can judge from records we are safe in saying that the affliction is a nineteenth-century one; it is dimly referred to in the first decade; in 1828 it was "hay fever," and had become fashionable; about the time the Queen ascended the throne the pollen theory was first enunciated, and since then we have had numerous theories regarding its origin, but no permanent or reliable method of treatment. In 1869 Helmholtz attributed the symptoms to vibrios, and prescribed a spray of solution of quinine, which was fashionable for a time, then fell into obscurity. Much excellent work has been done on the subject since, chiefly in reference to the etiology of the infirmity. It is conclusively proved that hay fever is rare amongst common people—it only attacks those of the higher civilisation; but there is no evidence to show how we can raise ourselves to this unenviable stage of gentility. The idiosyncrasy is hereditary—that at least has been proved; but what the idiosyncrasy is is another matter. "Whether it is due," says Dr. Mackenzie, "to some local abnormality affecting the structure of the mucous membrane, the capillaries, or the periphery of the nerves, but of too delicate a nature to admit of detection by available methods of research, cannot be determined;" and, we may add, is not likely to be until the advance of civilisation brings a few score of the afflicted persons to our hospitals. As to the exciting cause there is no doubt. "Pollen is the essential factor in the case of those who possess the peculiar predisposition." Ipecacuanha, lycopodium, and other substances do produce symptoms resembling hay fever; the warm sunshine induces some of us to sneeze immoderately—and that too is hereditary; but it is the pollen of certain grasses in this country, and of Roman wormwood (*Ambrosia artemisiæfolia*) in America which are the principal exciting causes. Dr. Mackenzie gives some particulars regarding the amount of pollen grains which exist in our atmosphere, based upon the number of grains which adhered to a certain surface on different days and in different localities in and around the metropolis, the experiments having lasted from June 9 to July 24. In the neighbourhood of meadow-land at Golder's Hill, the number to the square centimetre was from 20 to 1,250 grains; the smaller number was collected on a rainy day, and so was the larger; but on the day previous, in the latter case, hay-cutting had commenced, and that would throw an enormously large quantity of pollen into the air. On two days only in June and July was the air of the parish of Marylebone free from pollen grains; all the experiments, in short, conclusively prove the omnipresence of the exciting cause during the season. Dr. Marsh and others have demonstrated a similar state of things regarding the wormwood pollen in America. But Dr. Mackenzie does not lay down any hard-and-fast line for the exciting cause; he recognises that there are individuals who may not be affected by the pollen of anemophilous flowers; the rose and the lily are in some cases more disastrous than the grasses.

The irritation caused by pollen is different from that produced by dust or similar matter. Dr. Mackenzie conjectures

that the pollen grain undergoes in the nose the same development which takes place when it falls upon the stigma of the flower, that is, the pollen tube is formed while the grain adheres to the mucous membrane and penetrates the membrane. This appears to be the most reasonable theory which has been proposed. The immediate effect of this development is an itching, smarting sensation in the nose and eyes, and sometimes in the fauces and roof of the mouth. Sneezing follows, with a copious secretion of mucus; the nasal passages become highly inflamed and swollen, and conjunctivitis, inflammation of the eyelids, and asthmatic symptoms almost invariably intervene.

The nose being the first organ which is attacked, it is the region to which local treatment is applied. In this part of the subject Dr. Mackenzie strikes us as being not so happy as in the etiology of the complaint. Since we last noticed his book cocaine has been introduced, and he finds a spray of a 4 to 6 per cent. solution useful. Other applications of cocaine, such as bougies, are recommended. It so happens that Sir Andrew Clark took hay fever as the subject of the Cavendish lecture recently delivered, and to this we turn for the newest method of treatment. He also has used cocaine in various forms, and finds that it is useful in some cases and absolutely fails in others. The treatment which he advises is tonics, if the patient is weak, drachm doses of Easton's syrup, with 3 or 4 minims of hydrochloric solution of arsenic, being good. If nervous, the patient should get a mixture of tartarated iron, ammonium bromide, tincture of nux vomica, and arseniate of soda. For local treatment he recommends a mixture composed of glycerine of carbolic acid 1 oz., hydrochlorate of quinine 1 drachm, and a thousandth part of perchloride of mercury. The whole should be gently heated together until solution is effected. This is applied by means of a laryngeal brush in two operations, first to the upper part of the nostril, and then to the pharynx, the brush in the latter case being passed through the floor of the nostril. Sometimes a single application of the carbolic acid mixture is sufficient to prevent for a whole season the return of the hay-fever paroxysm, and four times within Sir Andrew Clark's knowledge it has never reappeared. Usually two or three applications are necessary to ensure a full chance of success. The operation is described as a disagreeable one, and patients object to it if this is not explained to them. It appears, however, to be the treatment of the season, and as such it will have a fair trial.

THE IODINE CONVENTION.

At the commencement of the present year the price of iodine, which had for some time been very low, and was expected to experience a further decline in consequence of the anticipated collapse of the combination of producers, suddenly, and to the astonishment of many dealers in the article, rose to 9d. per oz. The convention of the producers of iodine had been renewed, but the parties interested in it wisely kept their own counsel, and were enabled to reap a substantial benefit as the reward of their discretion. The new convention, to which most, if not all, of the manufacturers and the principal holders of stock in Europe, the United States, and the west coast of South America have acceded, was registered on February 18 at Iquique—the principal port of shipment in the iodine district—now held by the Chilians. The agreement, we understand, has been concluded for a term of three years, commencing on January 1, 1887, and it has been resolved that during this period the sale of the entire product will be vested in one house exclusively. The European manufacturers are to have for their share 40½ per cent. of the total sales effected, so long as the latter do not exceed

336,000 lbs. If the sales of iodine exceed that quantity—which means about ten months' consumption, and is, therefore, probably to be taken as an annual limit—ninety per cent. of the excess will fall to the share of the Chilian producers.

The parties interested in the convention, in addition to the English and French producers, are divided into three categories, viz.:—

Firms possessing iodine manufactories in working order and holding stock in Europe.

New manufacturers, carrying no stock in Europe.

Owners of iodine holding stock in Europe, who are not at the same time manufacturers of the article in South America.

The parties falling under the first category will be compelled, under the terms of the agreement, to suspend the manufacturer of iodine until their surplus stocks have been cleared off by their share of monthly allotments of sales effected. It is said that some firms hold enough stock in Europe to require two and a half or three years before, under this system, they will be allowed to resume working, and if the estimate of the European stock owned by Chilian holders is correct, this clause will apparently be tantamount to a virtual cessation of iodine production in the old Chilian works during the terms of the convention.

The new producers of iodine, forming the second class of contracting parties, have their output strictly limited to the quantity assigned to them as their monthly share of the orders. Firms who hold stock in Europe, but who do not possess works in South America, have to submit to a fixed reduction on the amount of their monthly share of the sales, in order to recoup the producers for the compulsory limitation or temporary cessation of their output. The producing capacity of all works included in the convention will be estimated, and the share of each contracting party in the orders is to be fixed according to the relation between the producing capacity of his works and the estimated annual consumption. To commence on January 1, 1887, the price for iodine for metallurgical and dyeing purposes is fixed at 6d. per oz., and for all other, including pharmaceutical uses, at 9d. per oz.

The aggregate capacity of production of sublimed iodine of not less than 98 per cent. standard in the South American works at the end of last year was estimated at 25,560 quintals, or 2,594,340 lbs.; the European stock of Chilian iodine at 10,177 quintals, or 1,032,965 lbs.; the export of iodine from the South American west coast in 1886 at 3,825·88 quintals, or 388,327 lbs.; and the world's consumption at 4,000 quintals, or 406,000 lbs. These figures would prove that Chili is at present capable of producing six and a half times as much iodine as is required for all purposes to which the article is applied, and it must not be forgotten that there is at present no prospect of any considerable extension in the use of the article, even though the price should fall to a third or a fourth of that prevailing. The stock of Chilian iodine now held in Europe would alone suffice for two and a half years' consumption, and the convention must therefore necessarily restrict the output of iodine in South America to a very small fraction indeed of the present producing capacity. The directors of the iodine association purpose, it is said, to gradually raise the price considerably beyond their present quotation, and as they control the market at this moment they will probably succeed. But the combination is likely sooner or later to come to grief through the impatience of its own members to submit to an artificial stunting of their producing powers, nor could the collapse of an association based upon principles so essentially vicious from an economical point of view be regretted, however disadvantageous it might be to its own component parts.

British Medical Association As we have already announced, the 55th annual meeting of this Association will be held in Dublin, beginning on August 2 and continuing over the three following days. The principal addresses will be delivered in the Examination Hall of the University. Professor W. T. Gairdner (Glasgow) will deliver the address in medicine, and the Rev. S. Haughton, M.D. (Dublin), will deliver the address in public medicine. Amongst the papers which have been promised are the following: Section of Medicine: "On the use of certain organic acids in the rheumatic, gouty, and allied diathesis," by Mr. John T. Knott (Dublin); in the same section Dr. Grainger Stewart (Edinburgh) will give an account of his albuminuria investigation, to which reference was made in this journal last week. In the Pharmacology and Therapeutics section Dr. E. C. Anderson (Walsingham) will speak on koumiss and koumissised peptones, with special reference to their uses; Dr. Joseph Farrar (Gainsborough) will contribute a paper on the use of sulphurous acid in typhoid, and Dr. Quinlan (Dublin) will make a communication on the therapeutic action of strophanthus. Dr. Unna, of Hamburg, the well-known dermatologist, from whose writings we have frequently quoted, is expected to attend the meeting, and will communicate a paper to the Pharmacology section on improvements in dermato-therapeutics. Dr. Edgar Crookshank, who has already made some notable researches in bacillopathy, will read a paper in the Pathology section on "the micro-organisms associated with malaria"; he will also give demonstrations in bacteriology, similar in character to those which he gave at Brighton. In the same section there will be a discussion on the etiology of chlorosis. The usual annual museum of novelties in drugs and the like will be open while the Association is in session.

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Treasonable Apprentices. Four apprentices in a drug house at Mulhouse (Alsace) were arrested on June 9 on a charge of treason (*lèse-majesté*). According to the reports in the Paris papers—which, however, are quite likely to be incorrect—the charge is based on a simple joke. One of the young men, named Jacques Paul, had received from a friend a paper containing a number of cabalistic signs, which, looked at in a certain light, formed words insulting towards the German Emperor. Paul and his colleagues—named Liebenguth, Gerard, and Roth—made some copies of the seditious page, and for so doing have gone to prison.

* *

Risks of Wholesale Traders We report two cases heard during the past week at the City of London Court which indicate a partially unsuspected risk run by firms who send out travellers to drum up orders. Mr. Commissioner Kerr, who is regarded as a sound lawyer, and has a very direct and popular style of expounding legal points, says that if a traveller or his firm take an order from a manager or an assistant acting on behalf of his employer, such order is executed without a legal ground for action if payment for the goods be refused, unless the plaintiff shall be able to furnish proof that the assistant or manager in question had explicit authority to pledge his employer's credit. The learned commissioner put a striking, but not very apt illustration. He said, "You go and order a coat and give my name and address, and see if I will pay for it." The position is not, however, at all similar. It would be an analogous case if his Honour were to refuse to pay for a leg of mutton which his cook might have ordered when the butcher called for orders.

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Alcohol and Strychnine. Mr. Jarochevski has informed a medical congress at Moscow that he has discovered by a series of experiments on dogs that strychnine is capable not only of destroying the narcotic action of alcohol, but that it also has the effect of "enabling the organism to support for a long time large quantities of alcohol without undergoing the lesions with which the organs usually affected by it are liable to be attained." That is a literal translation of Mr. Jarochevski's assertion. It was worth torturing a few dozens of dogs to get to know of a means to enable us to keep upright with a few more glasses of whisky inside us than we could carry before.



AND

Literary Notes.

MATERIA MEDICA TEXT-BOOKS.

A Manual of Vegetable Materia Medica. By G. S. V. Wills, F.L.S. Ninth Edition. London: Simpkin, Marshall & Co. 1886. Crown 8vo. 408 pages. Coloured plates and map. 10s. 6d.

The Organic Materia Medica of the British Pharmacopœia with Brief Notices of the Remedies contained in the Indian and United States Pharmacopœias. By W. Southall, F.L.S. Fourth Edition. London: J. & A. Churchill. 1887. Crown 8vo. 247 pages. 5s.

A Text-book of Organic Materia Medica of the British Pharmacopœia, with other Non-official Medicines. By Robert Bentley, M.R.C.S., F.L.S. London: Longmans, Green & Co. 1887. Crown 8vo. 415 pages. 7s. 6d.

THE whole of these books are free from the composite character which has rendered several works on *materia medica* and *pharmacy* favourites with pharmaceutical and medical students. They deal solely with the origin, composition, and uses of drugs, and in some cases with their substitutes and adulterations. The last-mentioned volume, by Professor Bentley, is a new-comer, and has certain novelties about it, such as the woodcuts incorporated with the text. The other volumes are well known and popular; and both have their peculiar and valuable features. All follow the botanical arrangement; in the case of Bentley's and Southall's the classification of Bentham and Hooker is adopted, and in Wills's, De Candolle's system is adhered to. In Bentley's and Southall's volumes some prominence is given to descriptions of each natural order; and in Bentley's the contents are "systematically arranged with the view of bringing before the student at a glance the sources of the various drugs, as well as the orders and higher divisions" to which they belong. Much the same thing on an amplified scale is done in Wills's manual, the tabular form being adopted in this case, and a chart of De Candolle's system occupies a prominent position in the front of the volumes. Curiously enough, we do not search in vain for similar information in Southall's "*Materia Medica*." It is evident, therefore, that the authors have been actuated by a wonderful unanimity of purpose so far as the garnishment of their volumes is concerned. In respect to the manner in which they deal with the subject as a whole, considerable difference is observable.

In Mr. Wills's volume the method of treating each drug is exactly the same as in previous editions, but the execution in many respects shows great advancement. The author, in short, has endeavoured to keep pace with the advance of pharmaceutical knowledge and the development of pharmaceutical examinations. In spite of what is frequently alleged to the contrary, there is no doubt that Minor students are now required to show greater knowledge of drug constituents than was demanded ten years ago, and Major men must be able to apply practically in the chemical laboratory that knowledge which some years ago they were only required to show at the *materia medica* examination table. The result in the latter case is, according to Sir Douglas MacLagan, not all that could be desired, for he has remarked that when the work given to Major candidates is "more of the pharmaceutical than of the merely chemical type, the failures are more frequent." The author's experience as a teacher has evidently brought him to the same conclusion, and he has incorporated in the present edition much valuable information regarding the composition of drugs, recent investigations being liberally drawn upon, so that the ancient information so common in text-books of this kind is reduced to a minimum. Tests for purity and methods of assaying are given throughout the volume, and at the end there is a new and excellent chapter on "Plant Constituents," which is of special value to Major students.

Southall's "*Materia Medica*," though a comparatively

small volume, travels over more ground than any of those under notice, for the reason that the more important drugs which are official in the *Pharmacopœias* of Germany, India, and the United States, and which are not official in the *British Pharmacopœia*, are commented upon. The collection of drugs receives comparatively little attention. The general method of treatment may be briefly summarised as follows: (1) A repetition of official "characters"; (2) "remarks," which consist of descriptions of different varieties of drugs, their principal characteristics and peculiar uses; (3) "chemistry," brief but complete enumerations of the whole of the known constituents (with percentages) of drugs, their characters and reactions; (4) "adulterations," which are much more carefully treated than in any work of similar pretensions. In addition to these, habitats, preparations, and the like are given.

Professor Bentley's Text-book, being a first edition, may be described more fully. As might be expected from the botanical editor of the *British Pharmacopœia*, we find here that the natural characters of drugs, their habitats, collection, commerce, and varieties receive special attention, and substitutions and adulterations are in many cases fully and interestingly described; but some spurious drugs and substitutes which have become somewhat common of recent years are not described. For example, Japanese aconite root has now obtained so firm a footing on our market that it threatens to exclude the official root, but no mention of this substitution is made in the text-book. "Collection and commerce" paragraphs are usually of great interest; for example, in the case of the poppy we are told where the poppy is grown in Britain, when it is collected, how dried and prepared for the market, and the reminder is added that the broken-up capsules of commerce should not be used for making the decoction, because the seeds are absent. Under the heading "General Characters" the *Pharmacopœia* text is considerably amplified and explained. It is under the paragraphs with this heading that the author introduces the excellent illustrations on wood of many important drugs—leaves, roots, seeds, &c. All the official umbelliferous seeds—generally a very puzzling group to the student—are represented by drawings of external appearance and transverse sections, with, in some cases, longitudinal sections. Drawings of some drug adulterants are also given, all being characterised by their exquisite finish. Under "Principal constituents" a bare enumeration is given of the known principal bodies which exist in the drugs. This is the weak part of the volume; for in addition to there being little of it—scarcely enough for the Minor student—it is occasionally inaccurate; as, for example, when we are told that cuprea bark contains two allied alkaloids, *cupreine* and *homoquinine*, the fact being that homoquinine is a mixture of cupreine and quinine. Again, we are told that the essential constituent of chrysarobin is chrysophanic acid, whereas it contains little chrysophanic acid, but much *chrysarobin*, a perfectly distinct body. *Medicinal properties* and *official preparations* are also mentioned. We may here state that Mr. Wills's book deals only with vegetable *materia medica*; Professor Bentley's takes in animal products, and Southall's, in addition to these, includes such substances as paraffinum molle, and a large number of animal, mineral, and vegetable oils, which are not generally to be found in such a small book. Mr. Wills has been assisted in his work by Mr. Watson Will, while, owing to the death of Mr. William Southall when he was engaged upon his work, it was taken up and completed by Mr. F. H. Alcock.

We have quoted several errors from Prof. Bentley's work. The other volumes are not innocent on this score. In Southall's it is stated that *podophyllum* root contains 3 to 5 per cent. of berberine, evidently on the authority of F. Mayer, who worked with an adulterated sample of the drug, and his observation has since been disproved. The amount of ash in linseed is stated as "about 3 per cent." ; this is too low, 5 being nearer the mark, and it often goes higher and seldom lower than 4.5 per cent. Phytosterin is omitted from the chemical constituents of calabar bean; calabarine is spelt calabrine, and a feminine instead of a neuter termination is given to the specific name of the cylindrical bean, an error which also occurs in Wills. "Gurgum balsam," we also notice, and considerable carelessness in beginning specific names with capital or small letters; indeed, they seem to be used indifferently. In Wills the congealing-point of oil of star-anise

is given as 8° C., which is 6° too high. Persian opium in sticks is said to be very inferior, but this does not generally apply nowadays. The specific gravity of Peruvian balsam is given as 1·15 to 1·16. B. P. gives 1·137 to 1·15. We observe several typographical errors of a similar character to those just noticed.

Although we have referred to these three text-books together, and although they have much in common, it should be understood that they are essentially different, and are each brought out for a specific purpose. Southall's "Materia Medica," we might regard as a reference book or students' notebook. Prof. Bentley has written his book for students during their apprenticeship and as a preparation for examination. He has, therefore, endeavoured to make it of an elementary character. Mr. Wills's volume is more pretentious, for it takes the student from the elementary to the most advanced stages of the chemistry of drugs possible for the student, and he does this in a manner which is calculated to give a thorough knowledge of the subject.

Taking Cold, the Cause of Half our Diseases. By John W. Hayward, M.D., &c. Seventh edition. London: E. Gould & Sons. 1s. 6d.

THE list of diseases which Dr. Hayward traces to taking cold is much too long to be quoted here; it includes very nearly the whole range. What he proves, however, is that the "taking cold" is not the primary cause in a great number of cases. Of two persons exposed to the same influences, one takes cold, the other is unaffected. The former was already in a condition which rendered him liable to "take cold," and therefore the cause of the ultimate disease can be pushed one step further back. But the "taking cold" epoch is as definite a one as most of us can arrive at, and no doubt forms a most useful text for a medical treatise. The circumstances under which we may and do take colds are so numerous that, as Dr. Hayward says, "the wonder is not that we should so frequently take cold, but that we should ever be free from it." The homoeopathic treatment of colds in their early stages and in their various developments is given by the author in some detail, but the special and most valuable purpose of his treatise is to call public attention to the powers of aconite as a prophylactic remedy. A few doses of aconite 3, either in tincture or pilules, is the treatment Dr. Hayward advocates for everyone who has been exposed to conditions which may bring on a cold. It will cut off the development of the symptoms, and therefore he urges that such an invaluable remedy should be kept at hand by everyone. "And so confident am I," he adds, "that the majority of diseases that afflict humanity result from taking cold that I impress upon all my friends the wisdom of always using aconite for the first signs of illness of any and every sort, and if that does not afford relief or check the symptoms, then to call in a professional man. And I am certain I have witnessed the beneficial results of this injunction." Chemists ought to make a business use of Dr. Hayward's professional advice in this matter.

The Mineral Water Makers' Manual for 1887. London: J. G. Smith, 165 Queen Victoria Street. 5s.

THIS volume of 134 pages contains, besides advertisements, a reprint of Gould's "Aerated Waters and How to Make Them," and gives much useful practical information to aerated-water makers.

Minutes of the General Medical Council, of its Executive Committee, and of the English Branch Council, from February 25 to May 20, 1887. London: Spottiswoode & Co. Price 3s. 6d.

WE received this volume of minutes within a week after the late meeting of the Medical Council. It gives a fairly full account of the proceedings; for example, the President's address is printed in full. The correspondence concerning the appointment of assistant-examiners to the Apothecaries' Societies of London and Ireland, a statement of a case and opinion by the Attorney-General and the Solicitor-General in regard to the combination of licensing bodies under the new Medical Act, as well as the proceedings relating to the appointment of inspectors of examinations, and other matters

of considerable interest to the medical profession, and indirectly to pharmacists are all to be found in "minutes" in a convenient form for reference.

Botany Notes.—Part I. Histology and Physiology. Part II. Systematic Morphology. By Alexander Johnstone, F.G.S. Third edition. Edinburgh: E. & G. Livingstone. 1887. 2s. per part.

THESE notes have been compiled for students preparing for the first examination in medicine and science, but have been adapted to suit other students, such as those preparing for the Minor and Major pharmaceutical examination. Notes are dry and unprofitable reading unless the student is working upon some foundation. If, therefore, the student who tries to get up his subject from such notes as these has not read some larger work, or attended a course of lectures, he is likely to acquire a very confused knowledge of botany. But under different conditions, when it is desired to recall in a brief period the facts which it has taken months to acquire, it is conceivable that the notes will serve the purpose. The notes are well arranged and modern.

Suggestions.

MAP-ENGRAVING WAX.—Linseed oil, 4 oz.; gum benzoin, $\frac{1}{2}$ oz.; and white wax, $\frac{1}{2}$ oz. Boil together and strain.

FRECKLES.—Hager removes these evidences of sunshine with an ointment composed of white precipitate and sub-nitrate of bismuth, of each 3*gr.*; glycerine ointment, 3*ss.* Each freckle is touched with the ointment every other day.

CRYSTALLISED SULPHATE OF IRON may be preserved from oxidation by placing upright in the bottle containing the salt an open test-tube partly filled with an alkaline solution of pyrogallic acid.

ITCHING PILES.—The intolerable itching of external piles is said to be relieved by the application of a lotion composed of turpentine, 2 parts; spirits of camphor and colourless tincture of iodine, of each 3 parts.

HOW TO CURE WARTS.—Place the thumb upon the wart, and press it against the bone. Move the wart backwards and forwards upon the bone until the roots become irritated or sore, when the wart will disappear." So says a correspondent of the *Scientific American*.

LIQUID GLUE.—Dissolve 4 parts of sugar in 12 parts of water, and add 1 part of slaked lime. Heat the mixture to 75° C.; then set aside for several days, agitating occasionally, until the lime is nearly dissolved. Decant the clear liquor, and in each 13 parts of it dissolve 3 parts of powdered glue in the usual way. This affords a good preparation.

STEARIC ACID may be detected in spermaceti by melting about a drachm of the sample, and adding a little ammonia or soda solution, and stirring for a few moments. Stearic acid, if present, is saponified by the alkali, and after separation from the spermaceti may be decomposed with an acid, collected, and weighed.

CEMENT FOR WHITE LETTERS.—The best cement for this purpose is dry white lead made into a paste with dammar varnish. The cement should be put in a uniform layer merely on the edge of the letter, otherwise too much surface will be exposed to the contracting influences of the varying temperature of the atmosphere.

SWEATING OF THE FEET.—Great relief is sometimes afforded by a foot-wash made by adding $\frac{1}{2}$ oz. of solution of subacetate of lead, diluted with water enough for a foot-bath. Hebra recommends an ointment composed of equal parts of lead plaster and linseed oil spread on linen, and wrapped round the feet, renewing the application every third day for nine days.

HALF a teaspoonful or more of common salt, taken as soon as the premonitory symptoms of an attack of migraine begin to show themselves, will frequently cut it short in about half an hour; similar treatment has also proved of service in epilepsy, as was remarked some years ago by Nothnagel: the explanation being probably in both cases that a violent reflex action is set up.

KOORCHI OR KOORCHEE.

By F. H. ALCOCK.

MANUFACTURING pharmacists whose trade extends to India often meet with unusual names for drugs in the orders received, a tincture, extract, or other preparation being required. Amongst the number the above is occasionally quoted, and hence reference to books has to be made. Our English authors of works on *materia medica* do not indulge too freely, if at all, in vernacular names of foreign drugs, so that it is of little use to seek for this kind of information from them. The Indian Pharmacopoeia does not allude to this drug-name under the account of this particular remedy which is contained therein. The omission, perhaps, can be explained if we conclude that koorchi is a new name, because the Indian Pharmacopoeia is now somewhat antiquated. The bark of *wrightia* or *holarrhena* anti-dysenterica (*Nerium antidysertericum*) is known as koorchi, koorchee, or *indrabaj*. The plant yielding it is a small shrub belonging to the natural order Apocynaceæ (Dogbane order), and grows wild in the hilly districts of the Concan, Ghauts, and other parts of India. This bark, which is the Conessi or Tellicherry bark of *materia medica*, is also called codaga pala, or *corte de pala*, and is of a spongy texture, a dull rusty-brown colour, and possesses a bitter taste and has astringent properties. It is much used in India as a febrifuge and tonic bitter, and in cases of dysentery and other troubles of the bowels, whether chronic or acute, it is much prized by the native doctors; hence also the specific name of the plant. Of preparations the following are used:—(1) A decoction of varying strength, by some made 2 oz. of bark to 2 pints of water and boil to half, by others 8 oz. to 2 pints of water and boil to half, the dose in the former case being stated at 4 drachms four times a day, and in the latter case 1 to 2 fluid ounces. An aqueous extract of the root bark is also prescribed in 3-grain doses with or without $\frac{1}{2}$ grain or more of opium. A tincture 4 oz. to 1 pint of proof spirit prepared *secundum artem* may also be used in doses of $\frac{1}{2}$ to 2 fluid drachms; as also a fluid extract (1 in 1), the dose of which is 5–20 minimis.

Dr. Stenhouse examined the seeds of this plant, and found that they contained a bitter alkaloid which received the name of *nerine* or *wrightine*, and more recently *conessine*. Its formula is stated to be $C_{11}H_{18}N$. The reputation of koorchee has on several occasions suffered because of the use of an allied bark, viz., that of *Wrightia tinctoria*, which, if it is not absolutely inert, certainly does not yield the good results expected from the administration of the preparations of the genuine bark.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

DR. ALBERT ROBIN was on June 7 elected a member of the Academy of Medicine, for the section of medical physics and chemistry. He is a fellow of the Paris Faculty, where he lectures at present on pathological anatomy.

GLANDERS ON BOARD.—Dr. Dhoste, the surgeon of the *St. Germain*, a mail steamer between Vera Cruz and St. Nazaire, reported that on his last trip a Spaniard received on board at Havannah in good health was five days later taken with acute glanders, and died on reaching Santander. The steamer was properly disinfected.

AGAINST SALICYLIC ACID.—The Minister of Agriculture has decided that, this year, an exhibition shall be held of all the products and appliances used in beer-making. The idea is to propagate the most improved processes of brewing and storing without salicylates, so as to dispense with foreign importation. By "foreign" German beer must be understood, as no fault is found with English ales. Certain it is that while French wines are cheap and good, French beer is uniformly bad, and costs 30 or 40 per cent. more than wine.

EMILE RASPAIL, a son of F. V. Raspail, the well-known extoller of camphor and popular agitator, died on June 10 at Arcueil-Cachan, a village of the Paris suburbs. Deceased was born in 1830, and obtained from the Ecole Centrale the

diploma of chemical engineer (ingénieur chimiste). He took an active part in the raising of the Paris barricades in 1870, and in consequence filled, from 1878 to the time of his death, the office of Mayor of Arcueil-Cachan. He was the director of the drug house, 14 Rue du Temple, where the Raspail popular medicines are said to sell in such quantities as to afford large profits.

DANGER OF COLOURED CHALK PENCILS.—Professor Jungfleisch, of the College of Pharmacy, recently made to the Seine Council of Hygiene a communication in which he pointed out to his colleagues the dangerous use of certain coloured chalks. In some public teaching institutions, he said, it is customary for illustrating on the black-board lectures on natural history, architecture, &c., to employ coloured chalk pencils in drawing various figures. As the colours are composed of litharge, minium, chrome yellow, and even mercuric sulphide in large proportions, and as after every drawing the lines are rubbed off with a dry cloth, a dangerous dust is set free, which may cause symptoms of lead or mercury poisoning. Hence manufacturers should be invited to use for such pencils harmless pigments instead of the compounds now employed.

A BRONCHITIS CURE.

DR. C. E. COVEY, Port Huron, Michigan, tells the following story in the *Medical Brief*:—An Englishman living near me made, several years ago, a trip to the "old country"; while in London he had a slight attack of bronchitis and applied at one of that city's many free dispensaries for relief. Dr. Dobell examined and prescribed for him. The prescription, which I will give you, was evidently intended to be useful and at the same time inexpensive, so as not to tax too heavily the charity that was expected to furnish the medicine for him. The fellow did not get it filled at the dispensary, however, but escaped with it, had it filled outside, and kept a copy. He was cured by the medicine, and on arriving at his home in this country he began telling his friends and neighbours that he was in possession of a prescription by a great English physician that was a sovereign remedy for coughs, colds, bronchitis, and, in fact, he recommended it, as such men are apt to do, for all diseases of the throat and lungs. He commenced selling it, and, as it was really beneficial in many of the troubles for which it was recommended, its fame spread from neighbour to neighbour until he worked up quite a business making and selling it. As it was paying him well he jealously guarded his secret, purchasing only one article at any one store, and often going out of town for his drugs and combining them himself. In the course of time he and his wife had trouble and parted. She had taken a copy of his recipe and commenced curing lung and throat troubles in opposition to him, and it was through her that the exact formula became known to me. The prescription is probably no better or more efficacious than any reader of the *Medical Brief* could write, but it has proved itself in many cases to be a useful medicine, and a glance at the formula shows it to be a cheap one and admirably adapted for dispensing at a free charity.

I have told you of this medicine simply to start a discussion of useful but inexpensive remedies, which, if we furnish our own medicines, we should take into consideration, for we will many times have to furnish medicine where the pay will be none too good, and the less the medicine costs us the less we will be out of pocket; and we should put our patients off, not with a poor remedy, but with a good but cheap one.

The Dobell prescription :—

Ammonia carb.	..	..	..	35 grains
Ipecac. wine	..	..	..	2 drachms
Chloride of [Chloric ?] ether	..	..	1 "	
Paregoric elixir	..	..	2 "	
Aqua q.s. ad	..	..	..	1 pint

M.

Sig.: Tablespoonful three times a day, or often enough to control the cough.

STICKY FLY-PAPER.—Burgundy pitch, 650 parts; linseed oil, 340 parts (weight); Japan wax, 10 parts. Melt and apply.—*Pharm. Centrale*.

Trade Report.

Note to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollect that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., June 16.

BUSINESS has been of a steady character since our last report. In the chemicals a movement has occurred in *Citric acid*, which has advanced about 7 per cent. from its lowest point last week, and is considered by some to be in a favourable position. In *Quinine* business has been rather restricted, although the advance of last week is fully maintained. *Refined camphor* has been in better demand, and we hear of a fairly lively business in *Potassium iodide*. *Morphia* and other opium products show no change. *Quicksilver* has been reduced in price by the importers, but in other chemicals no changes have occurred.

Business in *Shellac* is practically at a standstill for the moment, but *Cutch* remains very steady. *Olive* and *Linseed* oils are very quiet, but a speculative movement has caused an advance in *Turpentine*. *Rape* and *Cottonseed* oils are firm, and the demand for *Cocoanut* oil is growing, forward delivery especially being in a strong position.

At the spice sales there was a good demand for *Ginger*, but *Cloves* were somewhat easier, though business has since been done at increasing rates.

At the drug sales a fair assortment of goods was offered, and a tolerably large proportion of the parcels placed in sale was disposed of, including a heavy lot of *Gum asafatida*. *Cardamoms* sold at irregular rates, at first flatly, but gradually better prices were paid for good qualities. *Cubeb*s are cheaper, and of *Gum arabic*, Turkey sorts sold at low prices as compared to what was asked privately a short time ago. *Cape aloes* are 2s. lower in price, *Rhubarb* sold very cheaply, and *Senna* has also declined, say 1d. to 1d. per lb. Higher prices were paid for Jamaica *Sarsaparilla* and *Buccwax*, which is in good supply at very firm rates. *Musk* sold steadily. The heaviest falls occurred in *Vanilla*, which sold as much as 3s. to 5s. below valuation; and *Ipecacuanha*, which averaged about 1s. below valuation.

THE announcement that a bankruptcy petition has been filed against Mr. J. J. Whatley, trading as a colonial broker under the style of "Whatley & Co.", at 5 Fen Court, E.C., has created considerable surprise in Mincing Lane circles this week. It is stated that Mr. Whatley a few days ago went for a yachting trip to Amsterdam, and returned thence to Erith on the English coast, where some of his personal effects were found, but that he has not been seen since he left for Amsterdam, nor have his friends heard from him. Various rumours of the usual charitable description are afloat concerning the absent gentleman. Mr. Whatley has been in business as a broker, chiefly in *cutch*, *gambier*, *turmeric*, *shellac*, and *gum cowrie*, for several years, and was until lately in partnership with a Mr. Hicks, under the firm "Whatley & Hicks." The petition will be heard on June 27, at 11.30 A.M., in the Bankruptcy Court.

ACID (CITRIC).—There has been an advance since last week, owing, it is said, to a strong consumptive demand in consequence of the hot weather, but speculation has no doubt a good deal to do with the movement. At the same time the statistical position of the article is considered extremely favourable, stocks being small and spot supplies very scarce. On the spot 1s. 8*1/2*d. per lb. has been paid, and there are buyers at that figure, but no sellers under 1s. 8*1/2*d. per lb.

ACID (OXALIC).—The price of 4d. per lb. is maintained, while *Sal acetos* is still quoted at 6d. to 6*1/2*d. per lb.

ACID (TARTARIC).—The available supply is small, and the price keeps very firm at 1s. 6*2/3*d. per lb. for English, and 1s. 6*2/3*d. per lb. for foreign acid. *Cream of tartar* is rather quiet, although best quality is still held at 12*3/4*d. per ton.

ALOES.—At the auctions on Thursday the prices ruled lower for *Cape aloes*, of which variety about 100 packages were offered. Over one-half of these sold at 27s. to 28s. 6d. for fine bright hard, 26s. to 24s. 6d. for good to fair, and 21s. 6d. to 20s. per cwt. for drossy and soft quality. A few gourds very common *Barbadoes* were disposed of at 5s. per cwt. *Curaçao* aloes were scarcely represented; very good reddish liver sold at 5*1/2*. 17s. 6d. per cwt., and dark at 35s. to 40s. per cwt. About 120 packages *East Indian* aloes were catalogued—a good proportion dark *Socotra*, in kegs—which remained unsold. 7*1/2*. 10s. to 7*1/2*. 15s. per cwt. was paid for good coloured but very soft *Zanzibar*; 5*1/2*. 5s. to 5*1/2*. 17s. 6d. for soft pale, partly mixed with stones; and from 25s. to 60s. for very common to ordinary black quality.

ALUM is moderately active at 5*1/2*. 10s. for loose lump, and 6*1/2*. for ground in bags.

AMBERGRIS.—Seven tins were offered, of which four found buyers at 85s. for good flavoured grey, 53s. for ordinary, and 10s. for spurious.

AMMONIA COMPOUNDS.—*Carbonate* has not altered its price of 4d. per lb. nominally, and *Sal ammoniac* remains steady; first quality at 36s., second ditto at 34s. per cwt. The demand for *Sulphate of ammonia* continues, and supplies are getting very low, the consumption having been unusually large this year. Beckton 24 per cent. grey is quoted at 12*1/2*. 12s. 6d. in London, and 12*1/2*. 10s. at Hull.

ANISE.—A small parcel rather stony *Russian* seed sold at the previous price of 25s. per cwt. 45 cases *China star-anise* found no purchasers; 7*1/2*s. per cwt. was refused for 15 cases rather dull broken seed, imported by the new German mail steamers.

ANNATTO SEED.—Both East and West Indian seed is in good supply, and sells slowly at previous rates.

ARSENIC remains firm at 11s. 3d. to 11s. 6d. per cwt. for white powder.

BALSAMS.—No *Copiba* was offered in the drug sales this week. Sediment of *Peruvian* balsam sold at 3s. 6d. to 3s. 11*1/2*d. per lb.; a few cases good thin quality are said to have changed hands privately at previous rates. The recent attempt to force up the price of the article emanated from a Hamburg importer, who endeavoured to obtain the assistance of some of the local wholesale druggists in a scheme for buying up the whole of the supply in second hand. According to the statement of this importer, the total crop of Peruvian balsam this season amounts to 500 cases only, and the moment was, therefore, said to be favourable for a speculation. But the Hamburg druggists were of a different opinion, keeping in view the heavy stock at different Continental centres, and especially the utter absence of demand. The importer thereupon led off the movement single-handed by taking fifty to seventy cases out of the market, and the wholesale firms, seeing an opportunity of making a profitable investment, followed suit, headed by the principal firm in Hamburg. So far as the consumers are concerned, the movement is looked upon with little confidence, and hitherto the demand for consumption has not sensibly increased; but the fact that the bulk of the stock in Hamburg is now very firmly held renders it not improbable that prices, if they do not rise further, will at least remain firm. *Tolu* balsam quiet; a couple of tins were knocked down at 1s. 3*1/2*d. but good quality is held somewhat above that figure.

BUCHU.—A few bales greenish round leaves, somewhat stalky, sold at 3*1/2*d. to 3*1/2*d. per lb., at which latter price there is a good quantity offering.

CALUMBA.—361 bags, mostly of ordinary quality, were offered for sale at the auctions, but only 58 bags were sold at 15s. to 16s. per cwt. for small to medium sized dull brown root, mixed with a few yellow pieces. Ten bags good bright yellow root bought in at 50s. nominally.

CAMPHOR.—A large business in *refined* camphor is reported.

CANELLA ALBA remains neglected, and holders would probably accept a reduction on the recent price. The 38 bags offered at the sales were of medium quality only.

CANNABIS INDICA.—Seventy-three packages partly sold at easy prices, viz. 2d. per lb. for dusty, partly very stalky brown tops, and 1d. per lb. for brown siftings. Fine green tops are not offered.

CANTHARIDES.—A plentiful supply of more or less mouldy Chinese flies cannot find purchasers, and was bought in, as it has been many a time before, at nominal rates. Russian cantharides easy. Two cases of the red-bodied *Huechys sanguinea*, very mouldy, though offered without reserve, met with no offer.

CARDAMOMS.—Nearly 200 cases were offered in sale today. At the commencement the prices paid equalled those of the previous auctions, or were lower occasionally, but ultimately some of the better lots realised 2d. to 3d. per lb. above valuations. The following prices were paid:—*Ceylon Malabar*, good yellowish smooth medium to bold, 2s. 3d. per lb.; pale plump medium size, 2s. 1d. to 2s. 2d. per lb.; yellowish ditto, 2s.; good pale long, medium size, 1s. 10d. to 1s. 11d.; brownish medium size, badly clipped, 1s. 9d.; small palish plump, partly specky, 1s. 7d. to 1s. 8d.; dull coat *Aleppine* character, 1s. 5d. to 1s. 6d.; dull specky, partly very small, 1s. 5d.; brown and specky, 1s.; very small, 6d.; husks, 3d. per lb. *Malabar*, pale plump, rather warty, boldish size, 2s.; ditto, but badly clipped and cured, 1s. 9d. to 1s. 10d.; brownish, 1s. 8d.; small, badly clipped and cured, 1s. 3d. per lb. *Seed* sold at 1s. 5d. per lb. The Ceylon shipments from October 1 to May 19 were:—1886-7, 240,902 lbs.; 1885-6, 182,765 lbs.; 1884-5, 106,246 lbs.

CASCARILLA.—Fifty-one packages were partly disposed of at slightly lower rates; 23s. 6d. per cwt. was paid for sea-damaged but fairly bright partly silvery and dusty bark.

CINCHONA BARK.—The latest mail advices from Ceylon mention a slight decline in the price of poorer barks, while rich parcels maintain their last values. The exports from October 1 to May 19 were:—1886-7, 9,512,402 lbs.; 1885-6, 9,794,456 lbs.; 1884-5, 6,766,195 lbs. A cablegram states that on June 3 the exports fell 1,100,000 lbs. short of last season's. If this is a fact, the shipments from May 19 to June 3 must have been the shortest but one on record for the current season, while those from May 28 to June 3, 1886, were the largest known. The bulk of the supply in auction was formed by 110 serons flat yellow *Calisaya*, for which very full prices were paid, viz.: 2s. 3d. to 2s. 4d. per lb. for bold but damaged, 2s. 2d. for smaller but sound, 1s. 10d. to 2s. for rather severely damaged, and 1s. 1d. for badly damaged. A few serons ordinary partly damaged *Crown bark* sold at 6½d. per lb.

COCA LEAVES.—A good business has been done privately up to about 1s. 3½d. per lb. for fair *Huanoco*, but the heavy arrivals at New York mentioned in our cablegram may exercise an adverse influence on the price. In sale 3 bales very low and damaged leaves sold at 2½d. to 4d. per lb.

COCCELLUS INDICUS in better supply at the auctions than has been the case for some time. The 266 bags offered were nearly all sold at 9s. to 9s. 6d. per cwt.

COLOCYNTH.—Nine cases very broken, shrivelled and seedy *Turkish* apple sold at 8d. for sound and 7½d. per lb. for sea-damaged. Two cases were privately disposed of.

CROTON SEED.—Twenty bags low quality sold without reserve at 8s. 6d. per cwt.

CUBEBS are tending lower. The 21 packages offered were nearly all of undesirable quality; stalky, dusty, and mixed with spurious fruit. Five bags genuine but shrivelled and stalky berries sold at 16d. per cwt. The new crop is coming in. From Singapore we received 55 bags this week.

EPSOM SALTS.—Messrs. Lewis & Whitley, the firm whose name appeared on the packets of Epsom salts of which 10 cases were offered at the drug sales of March 19 last, write from Melbourne that they are not the packers of the salts. They ordered two tons of salts at the solicitation of the agent of a well-known London firm, to be put up with the purchasers' name on the labels, but refused the parcel upon arrival owing to its bad packing and unmerchantable condition. The lot was shipped back to London, and ultimately found its way into the drug sales.

GAMBOGE.—A few cases dull discoloured pipe sold at 9l. 7s. 6d. per cwt.

GUM AMMONIACUM.—There is very little demand for this article, of which 72 cases, including some very good loose drop and siftings, were catalogued. Only 6 cases dull blocky, dark and seedy mixed sold at 11s. to 11s. 6d. per cwt.

GUM ANIMI.—At the last public sales the holders of *Zanzibar animi*, of which variety 64 cases were placed in sale, showed little inclination to realise. Consequently the transactions were confined to less than one half the quantity catalogued, which sold at very steady rates, viz.: medium sorts, pale to reddish in colour, partly scraped, 11l. 17s. 6d. to 12l. 2s. 6d.; rather darker ditto, 9l. 10s. to 11l.; good yellow to dull bean and pea, 5l. to 7l. 5s.; low pickings at 40s.; and siftings at 27s. to 37s. per cwt.

GUM ARABIC.—The large arrivals of *Australian* gum caused a decline in the value of that variety at recent public sales, when no less than 208 packages were offered. Seventy of these sold at 80s. for fine bold frosted, not dusty: a considerable decline; good to dusty ditto, 76s. to 68s.; fair but small and dusty mixed, 60s. to 62s. 6d.; blocky and damaged pickings, 30s. to 40s. per cwt. This week a steamer brought 216 cases gum from Lyttelton. *Cape* gums, of which a good assortment of 122 packages was offered, sold at a heavy reduction, viz.: fine pale drop, 5l. 17s. 6d.; hard amber-coloured drop to ditto, partly blocky, 56s. to 42s.; common to blocky pickings, 32s. 6d. to 22s.; white dust, 95s.; bold yellow siftings, 56s.; small ditto, 26s. per cwt. Of *East Indian* gums 1,016 packages were catalogued, but holders' ideas being above those of the buyers very little was sold. A few lots fine pale glassy *Oomra* gum sold at 102s. 6d. to 105s.; and brown *Barbary*, rather dark mixed, at 102s. 6d.; *Ghatti*, fine pale, realised 80s.; good to bold, 63s. to 70s.; red and dark to ordinary, 35s. to 50s.; pickings and dull siftings at 15s. and 6s. per cwt.

Three bales *Turkey sorts* sold at 12l. 15s. to 12l. 17s. 6d. per cwt., and one lot fine small reddish *Magadore Anrad* at 75s. per cwt. At the drug sales a good variety of this gum passed under the hammer, and sales were made of *picked Turkey* at 14l. 10s. for fair small seconds; *Turkey sorts* at 13l. 7s. 6d. to 13l. for fair grey dusty sorts mixed with small drop, and 12l. 15s. to 12l. for rather more dusty and brownish ditto; and *Cape* at 8l. 5s. for fine white and yellow rather dusty to small, 59s. to 54s. for good glassy sorts, and 25s. for bold siftings. Some very fine bold frosted selected *Australian* drop was offered, but bought in at 82s. per cwt.; dark glassy ditto, at 62s. per cwt.

GUM ASAFOETIDA.—A supply of 26 cases was offered in sale. The whole of this sold at 33s. 6d. to 33s. (one lot 34s.) for good pinky to slightly greyish and smaller almonds; 32s. to 31s. for loose grey almonds to ordinary small pinky tears, fairly dry; 30s. for softish grey and pinky mixed; 29s. to 26s. for soft to very soft. No really fine asafetida was included in the supply, which was purchased in about equal proportions by the home and export trades.

GUM BENJAMIN in fair demand, with sales of 64 cases out of 214 cases offered. No *Siam* gum was sold. *Sumatra* realised 9l. 10s. to 9l. 2s. 6d. for good grey almondy seconds, false packed in corners; 8l. 7s. 6d. to 8l. 5s. for very fair almondy, but rather false packed ditto; 7l. 2s. 6d. to 7l. for fair. Low resinous *Palembang* gum sold at 14s. per cwt.

GUM COPAL.—About 60 cases *Manila* copal sold in the last auctions at 50s. for bold brownish scraped, 44s. for blocky ditto, and 26s. 6d. for blocky chips. A parcel of *African* pebble copal was bought in at 1s. 1d. per lb.

GUM COWRIE.—The position of this article shows no improvement, and at the last auctions only about one-third of the 1,218 cases offered found buyers, in several instances at a slight reduction.

GUM MYRRH.—The 55 packages offered included some very good pale *Aden* gum, which was all bought in. Only two bags rather dark *Aden* sorts sold at 92s. per cwt.

GUM OLIBANUM is arriving in considerable quantities, and at the last auctions drop sold about 2s., garblings 1s., and siftings 6d. per cwt. lower. Only part of the 771 cases offered was sold, at 55s. for fine bold pale drop, 45s. 6d. to 50s. for small dark mixed to good palish drop, 15s. to 15s. 6d. for garblings, 14s. for siftings, and 5s. for dark dust.

GUM TRAGACANTH.—Four bags low dull-coloured *Syrian* sorts sold at 63s. per cwt.

HONEY remains quiet. A few cases amber coloured *Californian* sold cheaply at 19s. 6d. per cwt., liquid dark brown *Jamaica* at 19s. to 19s. 6d., and dark brown rather impure *Japan* at 4s. per cwt., a bargain.

INSECT FLOWERS.—The first arrivals of the new Dalmatian crop are already obtainable, but excessive prices are demanded by the exporters.

IODINE.—The price remains unchanged, both for the crude article and for its compounds. There has been a considerable business done in *Potassium iodide*, and makers are very firm.

IPECACUANHA.—Forty-four packages, nearly the whole of which was composed of two recent arrivals, were offered. There was a reluctance to purchase on the part of buyers, who are evidently of opinion that much lower prices will prevail ere long, and only 7 serons were sold at a decline of 1s. per lb, viz., 7s. to 6s. 6d. per lb. for fair annulated to thin, partly damaged root.

LEAD (ACETATE) is well inquired for, but scarce on the spot. Foreign sugar of lead in this position has advanced to 25s. per cwt.

MUSK is in good supply, and some sales were effected at very steady rates, but the four caddies extra fine thin-skinned *Tonquin* pods offered remain unsold. Good first pile *Tonquin* pods, partly broken, thin blue skin and underskin, sold at 83s. to 84s.; very good third pile at 60s.; dull, black, and broken ditto at 25s. to 26s.; trimmings at 10d. Some good grain musk is held at 87s. 6d. per oz. A tin of good bold but somewhat juicy Russian *Cabardine* sold cheaply at 13s. per oz.

NUX VOMICA.—Eighty-one bags good pale *Bombay* were bought for a German manufacturing house at 14s. per cwt.

OIL (CASTOR).—Sixty cases fine *first Calcutta* oil sold at 4d. per lb.

OIL (COD LIVER) remains unchanged, although the position of *Loföden* oil appears somewhat firmer.

OILS (ESSENTIAL).—The harvest of orange flowers, from which the essential oil called *Neroli* is distilled, is now all but completed. The yield this year has been a good deal below the average. The rain and wind which have prevailed prior to the gathering have destroyed a large proportion of the blossoms. Since the end of May the price for flowers at Grasse has risen from 80 centimes to 105 centimes per kilo., or about 30 per cent. *Star-anise*.—The Canton market was bare of stock on April 21, the available parcels having been shipped to New York, but fresh supplies were expected in a month's time. The shipments of *Cinnamon* oil from Ceylon are growing very small. A variety of essential oils were offered at auction, but very few sales occurred, nor is there much business doing privately. Four cases *Eucalyptus Globulus* oil were bought in at 2s. 6d. per lb.; some very good Fisher's *Nutmeg* oil sold at 5½d. per oz., and 6 cases rather damp *Menthol* crystals at 3s. 6d. per lb., a fresh decline since the last sales.

OIL (OLIVE).—All varieties are very quiet, with the exception of *Mogadore* oil, in which a fair business is doing at 31s. 10s. The statistical position of the article is given as follows:—

		1887	1886	1885
Stock in London on May 31	Pkgs.	804	1,950	1,652
" Liverpool "	Tuns	645	380	380
Imports into U.K. first five months	"	11,250	10,812	13,364
Exports from U.K. first five months	"	1,122	1,217	1,462

OPIUM.—The following report from Smyrna gives a view of the probable crop considerably less favourable than that of the correspondent whose opinion we published last week. The former estimates the crop at 2,700, the latter at 3,500 baskets; but, as our correspondent who writes this week states, the estimates are at present all more or less guesswork. Our last week's correspondent put the London stock at 2,800 packages, considerably more than the stock in warehouse as given in official returns for May and June.

A letter dated "Smyrna, June 3," states:—"Already in December and January the reports from the interior spoke of damage to the crop in the soil owing to the unfavourable

weather which had prevailed for some time, and our buyers, who are mostly speculators, were tempted by these reports to effect considerable purchases at advancing prices, which rose in a still more pronounced manner in the spring, when drought commenced to seriously menace the prospects of our crop."

"Until December last, that is, before a kind of panic seized the operators, Karahissar opium, which is the variety by which our market is regulated, was quoted at the parity of 7s. 6d. to 8s. per lb. f.o.b. In December and January this quality was held at 9s. 6d. to 10s., at the commencement of February it had risen to 10s. 6d., and at the end of that month to 12s. 6d. From that point the rise made further headway, and in March transactions took place at prices between 12s. 9d. and 16s. per lb. The latter price is the maximum point which our market attained. Rain then fell in the producing districts, and it was at first believed that the harvest would be favourably influenced by this occurrence, hence the 'bull' party became more or less disorganised and the price of Karahissar opium again declined to 12s. 9d. per lb. In May, however, when it became possible to form a tolerably accurate estimate of the crop prospects, prices again advanced, and to-day (June 3) Karahissar closes firm with buyers of good sound lots at 15s. 4d. per lb. The latest reports from the growing districts are by no means favourable.

"Last autumn very little seed was sown, and a good proportion of what was put in the earth succumbed to frost in the winter. It is true that the belated rains of last March have been favourable to the spring sowings, but the yield of the latter is never so large as that of the autumn sowings. The approximate yield of the growing districts is estimated as follows:—

Salonica	600 baskets, against	750 in 1886
Malatia	200 "	800 "
Bogaditch	200 "	350 "
Yerli	350 "	700 "
Karahissar and district ..	300 "	2,100 "
Koniah	450 "	1,850 "
Other districts	600 "	950 "
		—
	2,700 "	7,500 "

These figures, however, are only estimates, for there is no such thing as official statistical information, and the only means of arriving at a knowledge of the yield is by comparing and tabulating the reports given by local correspondents; and the period from now until the end of the harvest may considerably modify the estimates." During the week seventeen cases more or less damaged *Persian* opium have been sold at from 4s. to 10s. 3d. per lb. The Constantinople market has advanced owing to the uncertain prospects of the new crop. There is not, however, any strong inquiry, buyers holding mostly aloof at present.

PATCHOULY LEAVES.—Nine bales were offered and bought in at 1s. per lb. for dull dusty, one half stalk, and 1s. 4d. per lb. for half dusty, half brown leaf.

PISTACHIO NUTS.—Prices are lower; 1s. 6d. per lb. will now buy fair quality.

QUASSIA.—About 18 cwts. fair chips, but partly very small, sold at 10s. per cwt.

QUICKSILVER.—The importers to-day reduced their quotation from 6s. 12s. 6d. to 6s. 11s. per bottle. The following was the statistical position of the article at the commencement of the month:—

		1886	1887
Imports from Jauuary 1 to May 31 ..	Bottles about	40,635	39,177
Exports	"	33,339	24,432
Imports for May	"	10,436	4,200
Exports	"	5,556	4,055
Price	Per bottle	6s. 10s. 6s. 12s. 6d.	
Stock in London on May 31 ..	Bottles about	70,000	60,500

QUININE.—The market is steady, sales having been made at 1s. 11½d. per oz. for *German* quinine in bulk—an advance of ½d. per oz. since last week. The makers quote 2s. to 2s. 1d. per oz., but 5,000 oz. Jobst's brand in bulk have been offering at 2s. per oz. *English* and *French* brands unchanged.

RHUBARB sold at cheaper rates, the decline generally averaging ½d. to 1d. per lb., which is not so much as might

have been expected considering the heavy arrivals by the last three steamers. The following prices were paid:—*Shensi*—good round, well trimmed, small to medium, good pink fracture, 3s. 6d. per lb.; small pale round, one half good fracture, 1s. 11d. per lb.; round pale medium to bold, rather spongy partly, dark in fracture, 1s. 9d. to 1s. 10d. per lb.; orange coated, flat, medium to bold, partly dark fracture, 1s. 5d. to 1s. 6d.; small flat pickings, 1s. 2d.; round, partly damaged, 1s.; wormy, mixed sizes, 9½d.; very wormy, black coat, and fracture, 6d. to 4½d. per lb. *Canton*, bold, partly dark fracture, dull coat, and wormy, flat and round, 5½d. to 6d.; *High-dried*, fair pale coat but spongy, and rather dark in break, 10d. to 9d.; ordinary, 8d. to 6½d. per lb.

SARSAPARILLA.—There is a very good demand for *Jamaica* sarsaparilla, which sold briskly at higher rates, 1s. 8d. to 2s. 1d. being paid for damaged to sound grey, and 1s. 1d. per lb. for damaged red. *Honduras* and *Guatamala* were offered but excited no interest.

SENNA sold at ½d. to 1d. per lb. decline, but by far the larger part of the quantity catalogued was bought in. The transactions included good greenish to fair *Tinnevelly* leaves at 8½d. to 7½d. per lb., ordinary blackish to fair 6¾d. to 2½d. per lb. No *Alexandrian* leaves were sold.

HELLAC.—In public sale on Tuesday 375 chests were offered, partly without reserve. Of this quantity 301 chests were sold at 53s. for *first orange*, H in diamond, very blocky, unworked, Calcutta terms, 52s. to 53s. for *second orange* SD in circle, also unworked, 46s. for CHP in a heart, 44s. to 45s. for HC in diamond, 43s. to 44s. for livery PP in diamond. 125 cases good free *Garnet* lac, unworked, Calcutta terms, sold without reserve at 38s. to 39s. per cwt. Privately there is scarcely any business doing.

VANILLA.—About 150 tins, the bulk rather brown in colour, were offered and mostly sold at a heavy decline, ranging from 3s. to 5s. per lb., much against the general anticipations. Nearly the whole was bought by one broker who has not hitherto turned his attention to this article in public sale. The following prices were paid:—8½d. to 9d. in, 23s. 6d.; 8 to 8½ in., 21s.; 7½ to 8½ in., 15s. to 21s.; 7½ to 8 in., 18s. to 19s. 6d.; 6½ to 7½ in., 12s. 6d. to 17s.; 6½ to 7 in., 12s. to 19s.; 6 to 7 in., 11s. to 16s.; 56 to 7 in., 8s.; 6½ to 6½ in., 11s. 6d.; 4 to 6 in., 11s. 6d.; 4 to 5½ in., 11s. 6d.

WAX (BEES') is in excellent demand, and sells at very firm rates. *Australian*, superior yellow slightly mixed with grey 6l. 7s. 6d., greyish ditto 5l. 15s.; *Bombay* grey and dark 5l. 12s. 6d., *Jamaica* fine gold 6l. 15s., good yellow and grey to bright orange 6l. to 6l. 5s., grey, orange, and red 5l. 15s. to 5l. 17s. 6d., red, dark and blocky 5l. 5s. to 5l. 10s. per cwt.

THE AMERICAN MARKETS.

NEW YORK, June 4.

OUR drug market has become quiet, and, owing to the anxiety of some holders to realise, a considerable number of articles have declined in price. This quietude is generally recognised as a lull or the natural reaction from the excitement which prevailed in our market during the early months of the year. It being conceded on all sides that a new era of prosperity is setting in all over the country, the drug trade, like all others, will benefit, and before long it is believed that an active inquiry will develop again. The export demand is still very slack: low prices appear to be no attraction.

The prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account. Importers can therefore see at a glance the course of this market compared with their own.

ACID (CARBOLIC).—The market has declined further, and 1-lb. bottles crystal are quoted 30c. (1s. 4½d.).

BALSAMS.—*Canada* is tending cheaper, as some of the new is on the way. *Copaiba* is a little easier for want of demand. Bright Maranham, 40c. (1s. 9½d.). *Pará*, 42c. (1s. 10½d.). *Peru* can be had in quantity for \$1.1 (4s. 10d.). *Tolu* sells in a small way at 30c. (1s. 4d.), the stock is greatly reduced.

BARKS.—*Cascara Sagrada* sells at 6½c. (36s.) in good-

sized lots; the stock is in few hands. *Jamaica Dogwood* can be had at 30c. (1s. 4½d.). *Simaruba* being without arrivals the price is steady at 12c. (7d.).

BEANS (TONQUIN).—There is a good consumptive demand for *Angostura* at \$1.30 (5s. 8d.); the stock is still very large, and new crop nearly due.

CAMPHOR.—A very active demand for refined caused a temporary scarcity, and as high a price as 30c. (1s. 4d.) was paid for 4-oz. blocks. The manufacturers are now even with their orders, and the market has gone back to 25c. (1s. 0¾d.), as the supply of crude camphor is reported to be large, and there is no fear of scarcity.

CUBEBS.—These berries have witnessed a remarkable decline, and place the predictions and actions of the "corner" who try to control the article in a ridiculous light. A short time ago they demanded \$2 (8s. 9d.) per lb., or 49l. per cwt.; now the same article sells for 75c. (18l.).

GUARANA.—No sales are reported, the views of consumers being about 75c. (3s. 3d.), while \$1 (4s. 6d.) and over is demanded by the importers.

IPECACUANHA.—The sales here are quite of a retail character; most of the jobbing houses appear to have ample stock to meet their regular wants; no arrivals took place.

LEAVES (COCA).—The supply of *Huanoco* is in the hands of the cocaine manufacturers, but the market may be quoted 35c. (1s. 8d.) for prime quality. *Truxillo* kinds are neglected at 25c. (1s. 2d.). The supply is ample.

LIME (ACETATE).—The export demand appears to have died out, but, as the home consumption is very good, there is, no change in the market. Brown 68 per cent. is worth \$10, c.i.f. London.

OILS (ESSENTIAL).—*Anisced* is nominally \$1.90 (8s. 4d.) but there are sellers below this figure; the stock is large—viz., 400 cases, or more. *Sassafras* has an easier tendency, and can probably be bought at 33c. in cans as received from the distillers; in shipping packages it is worth 36c. (1s. 7½d.).

OIL OF PEPPERMINT.—The position is unaltered: we are without demand; the prospects of the growing crop are good.

QUININE attracts no attention. Sales are few, and then only to supply immediate wants.

SARSAPARILLA (MEXICAN).—The market has declined, for the Philadelphia house here who control the bulk of the stock in New York and Hamburg have virtually given in, and offer 25-bale lots at 7½c. (4½d.), while "to arrive" large quantities are being offered from Mexico. We shall probably see the price 7c. (4d.) soon.

SENEGA ROOT.—The new crop is already offering from the North-West, and appears to be in good supply; the stock left over is said to be very heavy, being at least 35,000 lbs., and it is probable low prices will prevail. It is thought 32c. (1s. 8d.) for Manitoba root will be about the opening price, while for darker ordinary kinds 28c. (1s. 4½d.) will be nearest value.

SERPENTARIA.—The parties who gained control of the article for the past three years got severely bitten, having fully 20,000 lbs. left on their hands in Texas, and 5,000 lbs. in London. The new crop is now in the market, and meets with a good demand at 24c. (1s. 1½d.). If the digging turns out small the holders of the old stock, to save themselves great loss, may buy up the crop again. The general view is that consumers should secure some stock now, in support of which it is said that if the market goes a little lower they could not lose much, while they would be on the safe side in the case of an advance.

SPERMACETI.—The market is very dull and nominally unchanged. No sales are reported. With stock accumulating makers will want to make sales before long; 40c. (1s. 9d.) will buy.

CABLEGRAM.

NEW YORK, June 16.

COCA LEAVES.—We have just received heavy arrivals of good green *Huanoco* leaves on this market.

QUININE.—The upward tendency of the market, of which mention was made in last week's cablegrams, has been checked for the moment.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers please mark what you wish us to read

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

Before writing for formulæ consult the last volume, if you have it.

Linimentum Terebinthinæ.

SIR,—I am very reluctant to say another word on this subject, but the "summing up" of Professor Redwood in your last issue would seem perhaps to call for—it may be, necessitate—a reply from me.

In recommending pharmacists to adopt, though but as a temporary expedient for ensuring uniformity, the modification of the official formula for the preparation of this liniment, given in my paper, slight and unimportant as the modification is, I cannot but feel that I exceeded the legitimate limits of criticism and suggestion; and I desire to withdraw, unreservedly, such recommendation. At the same time, with all due respect for Dr. Redwood, I am still of opinion that the formula is an unsatisfactory one, and that a better and "more excellent" preparation is producible by following the simpler method I have suggested.

Yours faithfully,
GEO. E. PERRY,

171 Hagley Road, Birmingham.

Australian Eucalyptus Oil.

SIR,—It was with no little surprise that I learned from the leader in last week's CHEMIST AND DRUGGIST that the opinion has been expressed on the Continent that Australian eucalyptus oil is not a favourable source of eucalyptol.

Having had occasion to prepare three or four batches of eucalyptol during the past two years, I have always employed the Australian oil of *Eucalyptus amygdalina*, which, by Cloez's process, has yielded on each occasion from 45 to 50 per cent. of its weight of eucalyptol, rectified between 175° and 177° Centigrade.

I can, therefore, fully endorse the opinion of Mr. Lascelles Scott, that the statement that eucalyptol is absent from the Australian oil is "distinctly erroneous."

Yours faithfully,
J. OLDHAM BRAITHWAITE.

Laboratory, 50 Southwark Street, S.E., June 15.

SIR,—In No. 373 of your esteemed journal we find, on pp. 719 and 727, communications concerning eucalyptus oil in which the name of our firm is repeatedly mentioned. May we, therefore, ask you to insert the following reply?

In the first place we must define what is meant by "eucalyptol." Formerly there were different views on the subject, as is shown in the researches of Cloez, Faust and Homeyer, Pfaff, Oppenheim, and others. Recently, however, the question has been definitely solved by Wallach and Jahns, according to whom eucalyptol answers the formula $C_{10}H_{16}O$, which constantly boils at 176° to 177° C., and has a sp. gr. 0.930 at 15° C. It is not a mixture. We manufacture eucalyptol accord-

ing to Wallach's process, published in *Liebig's Annalen*, 225, 297, and there is no doubt whatever that it is a pure substance and not a mixture. In our laboratory we even obtained it in a crystalline form, melting at -1° C. (see *Liebig's Annalen*, 239, 23, and our Commercial Report of April, 1887, page 40). With all personal feelings of high esteem which we have for Mr. Bosisto, and notwithstanding the manner in which the gentleman with the fifteen years' experience, who writes on the subject on page 727, takes his part, we must maintain our assertion that the Australian oil of *Eucalyptus amygdalina*, such as we are in the habit of buying from Mr. Bosisto's agent, according to Wallach's process, does not yield and does not contain eucalyptol. It does indeed contain about 50 per cent. of a substance which has a boiling-point of 176° to 177° C., but the latter has a specific gravity of only 0.886 at 15° C., and is therefore not eucalyptol. It consists, in fact, of a mixture of a terpene, $C_{10}H_{16}$ (eucalyptene), and a small proportion of cymol. On the other hand, the African as well as the Californian oil of *Eucalyptus Globulus* contains about 60 per cent. of the true eucalyptol, specific gravity 0.930, and 176° to 177° C. boiling-point. In order to convince our English friends of their mistake, and in case the opinion of an unbiased authority should be considered necessary, we shall be glad to forward an original tin of *Eucalyptus amygdalina* oil to Professor Flückiger, at Strasburg, so that he may decide the matter under dispute. Far be it from us to deny the Australian oil of *Eucalyptus amygdalina* all therapeutic properties, but when we have the choice between it and another oil which contains a large proportion of true eucalyptol, we must prefer the latter. This discussion has rendered no particular service to the Australian oil in England. We have sold this oil since 1866, and we believe that we are entitled to some credit for having introduced it, as Messrs. Grimwade, Ridley & Co. will no doubt confirm. We are quite prepared to use any Australian *Eucalyptus Globulus* oil should it happen to be brought into commerce with a sufficient proportion of eucalyptol, for our sympathies gravitate to Australia rather than to Algiers.

We are, yours faithfully,
Leipsic, June 14.

SCHIMMEL & CO.

The Examinations.

SIR,—Since the subject of examinations is now placed so prominently before pharmacists, I will venture to make a few suggestions. As I have passed all the examinations of the Pharmaceutical Society without a failure, and have for some time since quitted the trade, any examiner who may chance to see this will know it is not due to "the spite of the ploughed."

First, with regard to the Preliminary. This examination is far too elementary and disproportionate to the Minor and Major. If the numbers are to be kept down by stiff examinations, it is only fair that the entrance should be the first pitfall. At least there ought to be added one book of Euclid, algebra to simple equations, and both the first book of Virgil and the first book of Caesar in Latin. If a youth fears this he is better out of the realm of pharmacy, as he will stand but a small chance at the next examinations.

Second, the Minor examinations. In this examination a fair chance is not given in dispensing. As I had a very simple prescription to dispense, only a blister for the ear and a simple draught, I have no cause to complain. Another man, as good as myself (perhaps better), may have had some impossible pills to compound, and have been ploughed. Each candidate should have at least six prescriptions (six distinct things) to dispense. How could any examiner know whether I was competent or not? This examination should be one day practical—dispensing and chemistry—and the next paper work. In chemistry there was very great unfairness; not in the individual examiners, but in the contrast between them. One examiner was very easy and one was very stiff, the other two medium. If the questions set by the two extremes were recorded, this contrast would be very striking. Another candidate and myself were waiting for chemistry. We went up to the laboratory; he had the stiffest, I the easiest; I passed, and he was referred to his studies. Had he had the elementary questions asked me, I should think he would probably have passed also. These remarks apply to other subjects. If questions were set on paper

there would be no room for hobbies. No eandidate for the Minor ought to be ploughed in botany alone.

Third, the Major examination. The second day's work should be entirely on paper; this would ensure all eandidates getting the same questions and the same chance. I was taken in chemistry by a fresh examiner, and the questions he set were quite out of the usual run. I made a mental note of them, and although I satisfied him I did not satisfy myself, as I know I did not do well. When I returned to my quarters, where I was staying with some more students, I repeated my questions, which were written down. One of them who was going up the next week looked up the answers; and when he presented himself he had the same questions, and obtained full marks in that subject. Was that fair? If the questions were set on paper this could not occur, and eandidates would have some chance of knowing what to prepare for.

The examinations should not be held more than three times a year—December, March (or April), and June (or July).

Yours truly,
EX-M.P.S.

Liq. Eastoni Conc.

SIR,—We shall be obliged for an explanation of the following. Having occasion to use liquor eastoni conc. [Extra Pharmacopœia, page 189], we found that our stock (made about four months) had deposited a lot of the quinine, which only partially dissolved on the addition of syrupy phosphoric acid, but on vigorously shaking the liquid solidified into a tenaceous mass. We had finally to heat and dilute the preparation to a strength of 1 to 8, instead of 1 to 16. If this arises from over-concentration, it would be well to warn others, so that they may not have a similarly unpleasant experience.

Yours, &c.,

A. L. DORAN.

[We have brought this matter under Mr. Martindale's notice and he sends the following note:—

"Of the various modes of preserving Easton's Syrup in a concentrated form that published in the fourth edition of the Extra Pharmacopœia would I expected prove the most satisfactory. I kept a sample of the liquor for six months before it was published, and concluded it was all right. But phosphate of quinine, even that of the same makers, for some reason unknown to me, varies in its solubility, and scarcely any sample of recent manufacture will make any concentrated liquor and keep in solution. Further, I find that the finished syrup will not hold 1 grain of phosphate of quinine in solution in the fluid drachm. As it is possible to make as little as 2 fluid oz. of Easton's syrup in a few minutes by my process, slightly modified, I would suggest to your readers to make the alteration as follows:—In place of the line "Distilled water to 2 oz." read "Syrup of phosphate of iron to 32 oz.;" and, practically, as only slightly over three-fourths of the quantity of phosphate of quinine can be held in solution, to put in this quantity, or as much as they find can be held in sction."

The formula as amended is as follows:—

Strychnine in powder	8 grains
Syrupy phosphoric acid, s.g. 1.5 ..	2 drachms
Distilled water	6 "
<i>Dissolve and add—</i>	
Phosphate of quinine	192 grains or q.s.
<i>Dissolve and add—</i>	
Syrup of phosphate of iron, to ..	32 oz.

Cultivation of Medicinal Plants.

SIR,—I shall be glad if any of your readers can give me any information as to the cultivation of indigenous medical plants. Is fol. anthemidis a paying crop? and would rad. taraxaci pay as a cultivated plant? The land is situated at the south of Durham—therefore rather cold and open. I should also like to know if any good practical book on the point is published.

Yours,
FLORA. (111/7.)

Cubebes in Ceylon.

SIR,—I notice in the last issue of your journal the following passage:—"With regard to the cultivation of cubebes in

Ceylon, the planters in that island do not apparently take kindly to the suggestion. In answer to a recent article in this journal, pointing out that it might pay cultivators in Ceylon to grow cubebes, a local planter writes to the *Trop. Agric.* that some years ago he resolved to do so, and got plants from the Royal Botanical Gardens. They grow well and fruit, but do not bear the kind of fruit that books say they should, although the director of the gardens declares them to be genuine cubebes."

I have not seen the *Tropical Agriculturist*, but I cannot help thinking that the writer in that journal makes a mistake in reference to the plant in question having been obtained from the local botanical gardens, as I notice a reference to some supposed wild cubebes sent for examination to Dr. Trimen, Director of the Gardens, who says in regard to them:—"This is not cubeb pepper, and bears, indeed, no resemblance to it. True cubebes are not found wild in Ceylon, and is a plant about which very little is known, though the medicinal product has been common in trade since the tenth century. I believe it is cultivated in the south of Java only for commercial purposes."

The statement by Dr. Trimen that "very little is known" in Ceylon regarding the cubeb plant would make it appear unlikely that any of them had been obtained from those gardens.

Yours, &c.,
OLD CEYLON.

The Pharmaceutical Council.

SIR,—Everyone will regret the real loss which Mr. John Williams is to the Pharmaceutical Council, but as an outsider I must say there appears to be something under the surface in this resignation which I do not quite understand. To put it plainly—Has Mr. Williams been shunted in order to replace Mr. Butt, who has just been rejected by his constituents? From what I am informed, on trustworthy authority, it looks very suspiciously as if it were so—so suspiciously that it warrants me in seriously anticipating what could be little short of a scandal in the Pharmaceutical world. Whether Mr. Williams was influenced in his resignation or whether he was seriously pressed to continue in office may never be known, but we shall all see who the wirepullers select to fill the vacancy. Mr. Martin, of Newcastle, I find, stood first on the list of unsuccessful candidates at the recent election, and, of course, in fairness should be chosen; but if I am right in my conjecture there will be an attempt made to pass him over in favour of the man who sat on the Council for years, and who last month received a determined and well-deserved defeat at the hands of those who, like myself, detest bumbledom.

Yours, &c.

Long Sutton, Lincolnshire, June 11.

R. WINFREY.

The Board of Inland Revenue and Labels.

SIR,—It may be well for chemists to know that the Board of Inland Revenue will not pass an opinion on a label if they have previously passed an opinion on a similar one.

Some months since I sent four varieties of a label (differently worded) to Somerset House. They wrote saying they did not *help frame* labels so as to evade the Stamp duty. Not knowing exactly what to do, I had one of the four varieties printed, and have them in general use. Some weeks or so since I sent this label again to Somerset House, saying I had it in general use; would they say if the preparation required a patent-medicine stamp, in reply to which they referred me to their previous letter, and said they wished no further correspondence on the label. I certainly did not expect this treatment, although perhaps I erred in sending four varieties in the first place.

I may say I have since sent the label to a friend in London, who forwarded it to Somerset House, when they returned it to him as not liable.

J. M.

This correspondent sends us two labels which have been returned from Somerset House marked "Not liable." One declares that the medicine (an iron and quinine tonic), "enriches and purifies the blood, strengthens the system, and imparts tone and energy to the digestive organs, and may be administered with the greatest advantage in all conditions indicating tonic treatment, and will be found a most agreeable and efficacious combination of those approved and valuable remedies—iron and quinine." The other label is

for an "iodised compound decoction of sarsaparilla, or blood purifier," which is said to be "prepared from the finest specimens of the root, with the addition of those esteemed alterative and diaphoretic medicines—sassafras, guaiacum, and mezereon—as directed in the British Pharmacopœia." It is added that it "acts as a purifier of the blood, without producing any of the injurious results attendant on the use of mercurial or other mineral preparations." We presume it is considered that in these cases the medicines are not recommended for a specific complaint. We have already discussed the corn solvent question.]

DISPENSING NOTES.

[*The opinion of practical readers is invited on subjects discussed under this heading.*]

Peter Plymly (110/18) sends us a copy of recipe for the positive and permanent cure of cold in the head, hay fever, catarrh, and bronchitis, and all diseases of the mucous membrane. In the external remedy for nasal douche, Arabian sea grass, Arabian kanke root, and acetate of silica are amongst the ingredients. The internal remedy contains extract Arabian calla root, comp. tinc. Arabian red lava flower, phosphosalicylate, and other ingredients. "Peter" would like some information regarding these substances.

An Examination Prescription.

SIR.—"Ferri Sulph's." prescription, prepared by the method recommended in my former note, has now stood for more than a week, and its appearance leaves nothing to be desired. There is no deposit. The solid ingredients remain in suspension, and are equally diffused throughout the mixture. The contents can be easily poured from the bottle, proving that there is no excess of tragacanth. As to the objections to the use of hot water, surely it should be a dispenser's care to avoid all possibility of future chemical action, so far as he can. "Heder" mentions that he has known one explosion. I too have heard of another. If, however, there should be little generation of carbonic acid gas in the bottle in the above recipe, it might take place when the mixture reaches the stomach. Is this the physician's intention?

Five different methods have now been given in your columns for preparing this prescription. Who is right? "When doctors differ," what is a poor candidate to do? Trusting that the examiners are very lenient in a case such as this,

I am, yours very truly,
ECOSSE. (109/54.)

SIR.—Will you kindly give me your opinion as to whether it would be allowable at the Square to use bism. carbonate when bism. subnitrate is ordered in conjunction with soda bicarb. This does away with any danger of explosion, and I think is practised at some establishments.

I am, sir, yours truly,
U.V.E PASS.E. (116/39.)

[If the substitution were made without the sanction of the examiner, the candidate would not, we presume, be allowed to proceed. Unauthorised alteration or substitution is in all cases fatal to the interests of the candidate, and rightly so. Take a case which has come within our knowledge. A prescription was given at an examination for a draught, which included 5 grains of powdered opium for a single dose. A pointed out to the examiner that the dose was likely to kill the patient, and got the reply that any explanation could be given after the prescription was dispensed. A put in the full quantity. B had the same prescription, and, without consulting the examiner, used only 1 grain of opium. A passed and B failed. We know that bismuth subcarbonate is used in many establishments instead of the subnitrate in such cases as that under discussion, but what is to hinder a dispenser heating the subnitrate and bicarbonate with a little water in a porcelain dish? We have seen mixtures of this kind, made in the cold, burst the bottle within an hour after they have been dispensed. Such results ought to be avoided.]

Liquor Quinæ.

SIR.—Will any of your readers kindly tell me what is meant by liq. quinæ in the following prescription:

Liq. quinæ	..	..	..	..	..	3ij.
Tinct. nucis vom.	..	..	..	..	..	11 <i>xl.</i>
Tinct. aurantii	..	..	..	..	..	3ij.
Aqua ad	..	..	..	..	..	3 <i>vii.</i>
M. Cap 3j. ter die.						

Yours, &c.,
X. Y. Z. (116/44.)

An Explosive Mixture.

SIR.—Will you kindly explain the cause of fermentation in the following recipe, and how it can best be avoided?

Vin. ipecac. B.P.	..	..	..	..	3 <i>½</i> parts
Oxymel scillæ	..	..	..	..	4 "
Syr. tolut.	..	..	..	..	42 "
Glyeerin. P.B.	..	..	..	..	5 "
Aqua ..	..	..	..	..	18 "

M.

Several bottles have exploded in my glass case. I may add that I prepare the syrup tolu from the liquor supplied by an eminent firm.

LL. (116/45.)

[Both ipecacuanha wine and oxymel of squills are often in a condition of incipient fermentation, due to the presence of micro-organisms. These micro-organisms would have a splendid field for work in the above mixture. If the mixture were made with tolu syrup containing the full quantity of cinnamic acid it would keep better. (The concentrated liquor is generally a comparatively weak preparation.) Use acet. scillæ and acet. ipecac. instead of oxymel and wine. The tolu syrup may be easily prepared by the process recommended by Stephenson (THE CHEMIST AND DRUGGIST, March 19, page 349).]

Iron and Carbolic Acid.

SIR.—Will you or either of your numerous correspondents inform me through your journal the reason why an almost black colouration is produced when the following is dispensed:

Tinct. ferri perchlor.	..	..	..	..	3iv.
Potass. chlor.	..	..	..	..	3ij.
Glycerin. ac. carbol.	..	..	..	..	3 <i>iii.</i>
Aqua ad	..	..	..	..	3iv.
M. ft. gargle.					

Yours truly,
PHOSPHATE. (115/2.)

[Carbolic acid forms a black, or greenish-black, compound with the perchloride of iron.]

Dessertspoonful v. Two Teaspoonfuls.

SIR.—In reply to "Cottonopolis," I regret that I still must differ from him. Since reading his letter I have measured six teaspoons, and find that on an average they hold 3ij. each. If "Cottonopolis" directs two teaspoonfuls to be given to a patient when 3ij. is prescribed, he will probably give 3iv., or 100 per cent. more than the intended dose. Granted that a dessertspoonful averages 3*ii*¹₄, "of two evils choose the least." The only remedy, Mr. Editor, seems to be to impress customers with the necessity of using only graduated measures, although Mr. Maben (THE CHEMIST AND DRUGGIST, March, 1886) has pointed out that these cannot always be depended upon. I am, yours truly,

ECOSSE. (109/54.)

SIR.—This immensely difficult problem, I think, is capable of solution, if we will only turn up some sort of an authority of more potent a character than individual opinion, even though it may be the leading physician of London, whoever he may be.

I find in my "Selecta è Prescriptis," 1847, page 60, a teaspoonful described as equal to 1 fluid drachm, a dessert-spoonful as 2 fluid drachms, and a tablespoonful 4 fluid drachms.

I advise all my customers on my prescription envelopes

to use a measure-glass, on account of the variable size of spoons in common use, and in following the above instructions of our earliest connection with this business I think we do all that is dictated by

COMMONSENSE. (116/2)

116/11. *Nemo*.—The decomposition which takes place when iodide of potassium and spirit of nitrous ether are mixed has been fully explained in the current volume, page 376. Your prescription is essentially the same, and cannot be dispensed without undergoing change.

Pulv. Magnes. et Boracis Comp.

44/39. *Grateful*.—A Liverpool correspondent has had a prescription for 4 oz. of a preparation with the above name. Dose: One teaspoonful in half a tumbler of water every night and morning. The prescription is by one of the leading medical men of Liverpool. Can anyone give the composition of the powder?

MISCELLANEOUS INQUIRIES.

112/69. *Pax*.—**Cough Mixtures.**—(1.) Chlorodyne (containing ext. cannab. ind., 3ij.; ipecacuanha wine, 3ij.; glycerine, 3j.; water to 3vj. M. Dose, a dessertspoonful. (2.) Tinct. opii ammon., 3vj.; syrup. scille, 3iiss.; tr. lavand. co., 3iv.; aq. menth. pip., ad 3vj. M. Dose, 3ij. to 3ss. (3.) Mucil. acac. 3iv.; tinct. tolutan., 3ij.; tinct. camph. co., 3j.; vin. ipecac., 3ij.; syrup, 3iiss.; aquam, ad 3iv. M.s.a. Dose, a teaspoonful slowly sipped. All of these are good; the last is specially useful in allaying tickling cough.

233/20. *Dudu*.—**Roche or Roman Alum** is a potash alum [$\text{Al K}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$] contaminated with ferric oxide. True Roche alum was prepared from alunite, a mineral found at Tolfa, near Rome. This mineral was a mixture of the double sulphate and hydrate of alumina with the ordinary impurities. It was roasted, whereby the hydrate was converted into anhydrous alumina. The roasted mass was then treated with water, which dissolved out the double sulphate. The solution yielded cubic crystals of the alum contaminated with ferric oxide, which gave it the red colour. It was valued by dyers because the iron in it was not dissolved by water, being insoluble, whereas most commercial alums do contain iron in a soluble form, and thus affect the colours.

112/59. *Amicus*.—**F. L. S.**—Write to the secretary of the Linnean Society, Burlington House, London, W., for a form of application. This you require to fill up, and you must have the signatures of three fellows testifying to your qualifications. The admission fee is 6*l.*, and the annual contribution 3*l.*, that is 9*l.* for the first year.

110/47. *Florida Water*.—**Mr. W. Francis Norman** (Leamington) writes in reference to a recent formula for Florida water:—"The formula runs, 'Cologne, spirits, and water.' This, I take it, stands for Cologne spirits, which in perfumery (American especially) means the first three hours run of a clean still, answering to our silent spirit."

110/19. *Exam*.—There is no limitation of age for the **Apothecaries Assistants' Examination**; persons under twenty-one, as well as over that age, may enter for it.

110/16. *X.—Hair Restorer*.—The best lead restorer is made by adding to a solution of acetate of lead (1 oz. to the pint) a saturated solution of hyposulphite of soda until the precipitate which is formed is redissolved. You may then add to this solution an ounce of mills of sulphur, for the sake of appearance, it not being necessary for the efficacy of the restorer, and some French essence, such as white rose, for perfume. Add also 3ij. of glycerine, and make up to 3 pints with water

110/25. *E. Williams* wishes information regarding "Lunarca, a substance recommended for horses in 1695."

110/12. *Notts*.—**Indian Cerate**, sold largely in Lancashire and the Potteries, is made from the following formula:

	Oz.
White wax	8
Olive oil	40

Melt and add 1 drachm of camphor; after this has dissolved add the mixture gradually to

Sugar of lead	2 drachms
Precipitated chalk	8 oz.

previously made into a paste with water.

Notts says:—"I find the hop bitters, for which you gave me a recipe some time ago, sell well, and give satisfaction."

112/36. *Dairyman*. **Salting Butter**.—From 1 to 5 per cent. of salt is used according to the season and the length of time it is to be kept. Saltpetre, sugar, and boric acid are sometimes used along with the salt. We cannot advise you as to how the butter should be sent into the market. You will find the information in some such work as "The Cow" (Ward, Locke & Co., 1*s.*).

113/1. *Anxious One*.—**Furring in Kettles** is prevented by keeping in the kettle a clean oyster shell. There is a "ball" used. Can anyone inform us of its composition?

68/118. *J. H. H.*—We must decline to repeat inquiries which do not get answered.

Jeroboam.—*Heder* says:—"A nostrum of this name is sometimes asked for. Can anyone who has lived in the West of England give its probable composition?"

115/28. *Mr. H. C. Goodman* (St. Catharines, Ont.) writes in reference to decolorising spirituous liquors which have come in contact with iron, that two or three ounces of milk to the gallon will precipitate all the iron and leave the liquid clear. Mr. Goodman has also experienced the action of window carboys as lenses. A hat lying in his store had the crown burnt out of it "as the sun went on its course."

115/25. *Apprentice*.—You will find an explanation of the recipe in our Correspondence columns of a few months back.

115/3. *Thos. Blackman*.—You will find directions for bleaching sponges on page 643 of this volume.

114/31. *A. C. R.*—**Varnishing Labels**.—The labels should first receive a thin coat of acacia mucilage, which should overlap the margin. When that dries you may apply any varnish without fear of the labels becoming greasy.

7/116. *Dejacmech*.—Your letter refers only to the internal arrangements of the Pharmaceutical Society, which in no degree concern the trade generally.

Ecosse says:—"Prepared chalk is generally sold in Edinburgh for Spanish whiting."

116/56. *Nil Desperandum*.—**Baking-powder Formula**.—May 21, page 644.

116/59. *Ormonde*.—You will find the results of analysis of **Warner's Safe Cure** on page 401. The golden tint is given to sponges by first bleaching them, and then dipping in a solution of carbonate of potash.

114/41. *Nomen*.—**Ginger-beer Powder.**—For the label which you send, use cream of tartar, 6 drachms; bruised ginger, $\frac{1}{2}$ oz.; ess. lemon, 3 drops. Mix. This for 2 gallons of water.

116/37. *West Riding*.—We do not know of any reliable method for making **Aq. Menthae Pip. Conc.** (1 to 40) other than that which has frequently been given in this journal—namely, to dissolve the oil in spirit, treat with carbonate of magnesia, and filter. For example, dissolve 5ij. of oil of peppermint in 5vj. of rectified spirit; shake well up with 5j. of magnes. carb. levis, and filter. Wash the magnesia with spirit until you get 5j. of filtrate. One part of this added to 39 parts of water makes aq. menth. pip.; but whether of pharmacopoeial quality and strength is a different matter. It is stated that one of the popular brands of concentrated waters is simply made by distilling an alcoholic solution of the oil. You will find sensible advice in the Diary for the current year. There it is stated that the best plan is to make a solution of the oil (5vj. in 5iv. of S.V.R. 60 o.p.); add 5j. of this to $\frac{1}{2}$ gallon of water; shake well, and syphon off the clear water as required, or it may be filtered through a wet filtering-paper.

116/32. *W. M. S. W.—Tartar*.—Your customer should use the tooth-powder recommended by Dr. MacGregor, which is made from the following formula:—

Boric acid, finely powdered ..	40 grains
Chlorate of potassium ..	$\frac{1}{2}$ drachm
Powdered guaiacum ..	20 grains
Prepared chalk ..	1 drachm
Powdered carbonate of magnesia ..	1 oz.
Attar of roses ..	$\frac{1}{2}$ drop

M.

This should be used every morning and after each meal, if possible. The irritation caused to the epithelium will be greatly allayed by using a mouth wash composed of tincture of myrrh and boric acid. Saturate the tincture with the acid, and direct a teaspoonful to be used with a quarter of a tumblerful of water to wash the mouth.

J. M.—The rationale of boiling pigs' feet is beyond our ken. Arsenic mixed with tar or paint has been recommended for preventing weeds growing on boats (see page 401). To prevent steel goods rusting, give them a coat of a solution of paraffin in benzine (5j. to 5j.). Vaseline or ung. hydrarg. is equally effective.

114/66. *J. H.—Devonshire Oils*.—Dissolve 1 lb. of soft soap in 1 gallon of boiling water, and add—

Bole armenise ..	3jss. or q.s.
------------------	---------------

Then take—

Spt. terebinth. :	..	..	..	..	Oss.
Liq. vol. c.c.	..	..	..	..	3j.
Spt. camph.	..	..	..	..	3ss.
Tinct. opif	..	..	..	..	3ss.

Mix, and make up to a winebottleful with the soap solution. For scour in lambs, add ext. opif liquid, 5j.

113/71. *W. S. Green (Paris)*.—You will find a formula for hair dye (two bottles) on page 643, directions page 672; a formula for the dye in one bottle will be found on page 597.

113/67. Charcoal Tooth Paste.—

Levigated charcoal ..	..	..	..	..	4 oz.
Precipitated chalk ..	..	..	..	..	2 oz.
Glycerine ..	..	..	..	..	$\frac{1}{2}$ oz.
Otto of rose ..	..	..	..	..	5 drops
Honey ..	..	..	..	..	q.s.

Mix the powders, add the otto of rose, rub well, then add the glycerine and sufficient honey to make a paste.

114/38. *Chromium*.—**Warts**.—Take 10-grain doses of sulphate of magnesia early every morning for a month.

111/1. *G. H.*—We have no other formula for cheap sauces.

116/34. *F. G. Plant*.—We cannot trace the original patent for self-raising flour, but we suppose that it is an expired one.

116/5. *W. E. M.—Seltzogene Powders*.—18 scruples of tartaric acid and 22 scruples of bicarbonate of soda are used for the 3-pint seltzogene. **Cheap Perfumes**.—Oil of verbena, 5j.; tonquin bean, 5j.; rectified spirit and water of each, 10 oz. Digest for a week, and filter through magnesia. Citronella oil may also be used in the same way. You may get a perfume fountain through the Exchange Column much cheaper than you can possibly make one.

Liq. Copaiab., Buchu, Cubeba, &c.

P. O'B. T.—The following formula for liq. santal. co., from our last volume, may suit you:—

Ol. santal flav. ..	..	..	..	200 minimis
„ cubebæ ..	..	..	..	100 "
„ copaiæ ..	..	..	..	30 "
„ pimentæ ..	..	..	..	5 "
„ cassiae ..	..	..	..	5 "
Tinct. buchu ..	..	..	..	600 "
Infus. buchu co. (1 to 7) ..	..	..	..	600 "
Aq. ..	..	..	..	300 "
Spt. vini rect. ..	..	..	..	780 "
Liq. potasse ..	..	..	..	600 "
Pulv. lap. pumic ..	..	..	..	3 drachms, vel
Calc. hydrat. ..	..	..	..	1 oz.

Heat the liq. potasse to the boiling-point, and pour into a bottle along with all the oils. Allow to stand for two days, shaking occasionally, after which add the water, and let stand for half an hour, and then add the tr. buchu, spirit and infns. buchu, and shake well together. Lastly add the lime, or pumice stone, and allow the whole to stand for three days, when it may be filtered through paper.

114/7. *Granite*.—Hydrochloric acid rubbed on with pumice is used to remove vegetable growths from granite monuments. Several coats of a solution of paraffin in benzol may prevent a renewal of the growth.

116/34. *F. G. P.*—Glass is polished by means of emery powder and oil, but the art is one which can only be acquired by experience, and a novice should not begin on a glass show-case.

Glycerine and Cucumber.—*S. P.* (117/38) writes:—"If 'Pepo' would adhere to the recipe given in THE CHEMIST AND DRUGGIST, using no heat whatever, he will get a good result."

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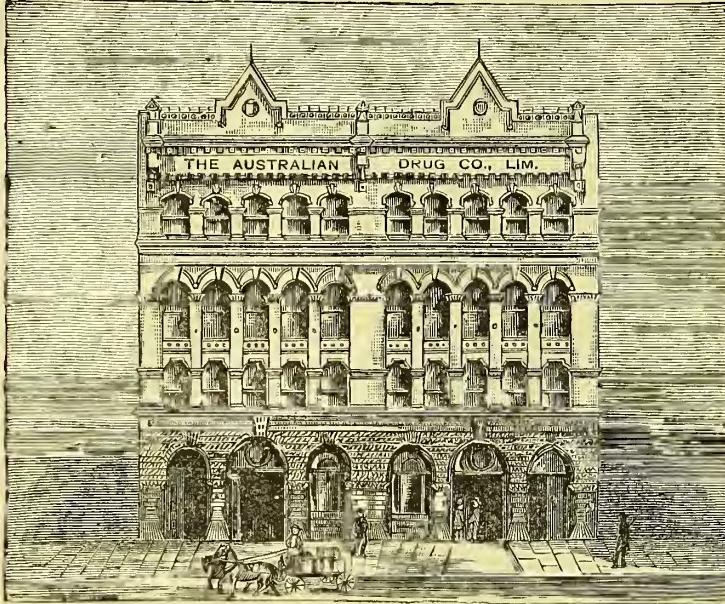
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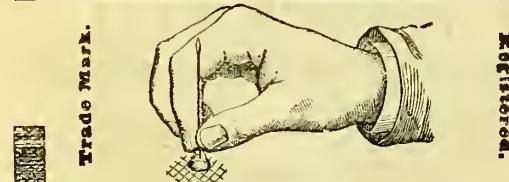
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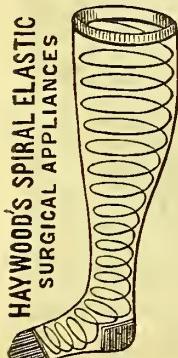
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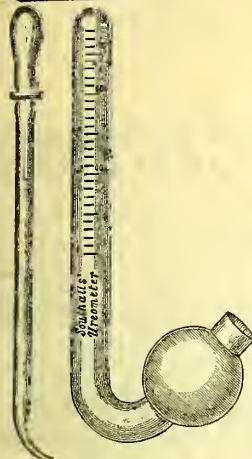


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IMPORTANT TO CHEMISTS & PATENT MEDICINE DEALERS**Large Profits and a Ready Sale. NO RISK.****BECK'S COMPOUND TONIC****HOP BITTERS***Composed of Hops, Buchu, Podophyllin, Dandelion, and other valuable ingredients.***IN HALF-PINT BOTTLES TO RETAIL AT 1/-**

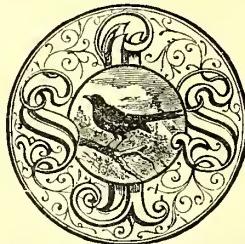
SOLE PROPRIETOR—

ALBERT N. BECK, WHOLESALE CHEMIST, HASTINGS.**PRICES—CASES OF 3 DOZEN, 22/- NET.**

Free on rails in London. Cases and Packing 2/- extra, allowed in full on return.

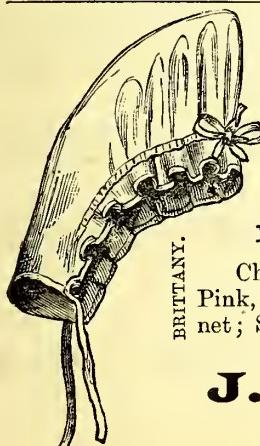
SPECIAL OFFER TO LARGE PURCHASERS.—If 6 dozen and upwards ordered, the Name of Retailer will be printed on Label, and 1,000 Handbills bearing Name and Address will be supplied, and also Show Cards.**TERMS:—CASH WITH ORDER OR TWO LONDON REFERENCES.****NOW READY.****J. SANGER & SONS' NEW & REVISED PRICE CURRENT**

With over 300 Illustrations. It will be found to be a most Comprehensive List of

PROPRIETARY MEDICINES, DRUGGISTS' SUNDRIES,**PERFUMERY, LOZENGES,****MINERAL WATERS, &c.,**AND WILL COMPARE FAVOURABLY WITH
ANY OTHER LIST AS TO**PRICES CHARGED.**POST FREE ON RECEIPT
OF BUSINESS CARD.

Purchasers of Druggists' Sundries, Smelling Bottles, Hair Brushes, Combs, Sponges, Thermometers, Filters, and Boxes of all descriptions should pay a visit to our Showroom before purchasing elsewhere, in order to compare our prices and quality against other houses.

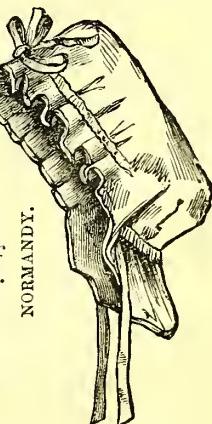
AGENCIES OF ALL KINDS UNDERTAKEN
ON FAVOURABLE TERMS.



BRITTANY.

Bathing Caps, Normandy or Brittany Cap Shape.

Check Sheeting, per doz. 21s., 18s. net; Jaconet, White, Yellow, or Pink, per doz. 21s., 18s. net; Pointille Check, per doz. 28s., 23s. 11½d. net; Sateen Check, per doz. 29s. 6d., 25s. 2½d. net.



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**NOVELTY
IN
BATHING CAPS.**

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EXTRAORDINARY CHEAP LINE. THE WATCH SMELLING-SALT BOTTLE

These Bottles are fitted with BEST SCREW NICKEL CAPS, lined with Washers, and are the most wonderful value ever offered. A trial order will prove this fact.

PRICE, IN BEST WHITE FLINT OR ASSORTED COLOURS, **12/- per gross.**

Orders may be sent through any of the Wholesale Houses, or direct to

E. A. HEARN & CO.,

Manufacturers of Glass Bottles
of every description,

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The annexed Illustration shows exact size of above-mentioned Bottle.

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Dispensing,
Drugs, Oils,
Mineral Waters,
Perfumery,
Patent Medicines,
&c., &c.

KILNER BROTHERS,
No. 18 Gt. N. GOODS STATION, KING'S CROSS, LONDON.



BOTTLES

FEEDERS in
immense variety
of styles.
Best Quality.
Low Prices.
Lists on application.



THE HEART SCENT BOTTLE

FOR SALTS

(REGISTERED)

FOR PERFUME

Is most admirably adapted for pocket use, combining great beauty of design with the maximum of convenience.

A LONG DESIRED REMEDY.

The Caps for these Bottles will be fitted with Patent Indestructible Washers, which entirely resist the action of Ammonia, thereby effectually preventing the corrosion of the Cork and the inevitable deterioration of the Salts.

Prices as follows, Plain or Fluted:—WHITE, 21/- per gross; COLOURED, 24/- per gross.
If put up in Dozen Boxes, 2s. per gross extra.

Orders may be sent to the Principal Wholesale Houses, or to the Patentee and Manufacturer,

R. H. BARRETT,

FLINT GLASS BOTTLE WORKS, THE OVAL, CAMBRIDGE HEATH, E.

N.B.—A remittance must accompany all orders.

ESTABLISHED 1871.

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GLASS BOTTLE MANUFACTURERS,

81 and 83 BLOOMSBURY, OXFORD STREET,

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Supply every description of above in any colour or shape. Write for prices, and compare before ordering elsewhere.

OUR "W. & CO." DISPENSING BOTTLES

Are equal to anything in the market, and are 15 to 20 per cent. less than charged for similar quality goods by other houses.

Feeding Bottles, fitted and unfitted; Shop Rounds, Graduated Measures, &c., &c.

Special attention paid to Shipping Orders.

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Special attention is called to our "New Crystal Blue Tinted," being handsome colour and clear glass. We supply them, 3 and 4 oz., 8/-; 6 and 8 oz., 9/- per gross.

A sample bottle forwarded on application.

WHITE MOULDED PHIALS AT VERY LOW PRICES.

I. ISAACS & CO.,

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25 Francis Street, Tottenham Court Road, London, W.C.

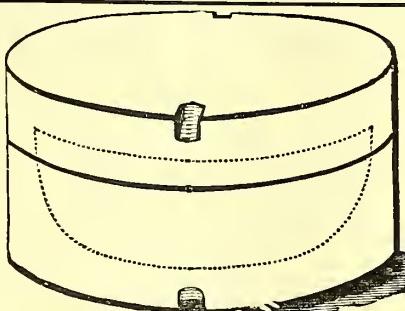
Established upwards of 50 years.

WILLIAM TOOGOOD'S ◆ SPECIALITIES. ◆

WAREHOUSE AND SHOW ROOM,
BURLINGTON BUILDINGS,
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TOOGOOD'S
IMPROVED PATENT
**EARTHENWARE
COVERED POTS**

*Are claimed to be the most perfect
and convenient yet offered to the Trade.*



ORDINARY THICKNESS—											
1 dr.	2 dr.	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	3	4	6	8	ounces.
<i>1/6 1/6 1/6 1/7 1/8 1/10 2/2 2/10 3/4 4/6 5/6 per doz.</i>											
THIN for DISPENSING—											
$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	3	4	6	8	ounces.		
$1/7$	$1/8$	$1/10$	$2/-$	$2/4$	$3/-$	$3/8$	$5/-$	$6/-$	<i>6/- per doz.</i>		

Owing to the increasing demand for our Patent Pots, we have introduced a Special THIN Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

TOOGOOD'S
BURNT-IN POTS,
FOR COLD CREAM, TOOTH PASTE, &c.

ARTISTIC DESIGNS AND NEW SHAPE JARS.

Samples and Prices forwarded upon application.

OF A VERY SUPERIOR QUALITY.
CONICAL OR CYLINDRICAL. STOUT AND ACCURATE.
3*j.* 3*j.* $\frac{3}{4}$ *s.* $\frac{5}{4}$ *j.* $\frac{7}{4}$ *j.* $\frac{9}{4}$ *j.* $\frac{11}{4}$ *j.* $\frac{13}{4}$ *j.* $\frac{15}{4}$ *j.* $\frac{17}{4}$ *j.* $\frac{19}{4}$ *j.* $\frac{21}{4}$ *j.* $\frac{23}{4}$ *j.* $\frac{25}{4}$ *j.* $\frac{27}{4}$ *j.*
6/6 8/6 6/- 7/- 8/- 10/- 11/6 15/- 16/- 18/- 25/- 36/- 72/-
STAMPED, 3/- PER DOZEN EXTRA.

TOOGOOD'S
GRADUATED MEASURES.

Are all sent out washed and dried, ready for immediate use.

TOOGOOD'S
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The most Showy Bottle in the Trade for all Toilet Requisites, as Hair Washes, Face Lotions, and Tooth Preparations. Samples and Prices upon application.

TOOGOOD'S
CORN-SOLVENT BOTTLE.

2-dram Actinic Green Round Shouldered Vial, with Boxwood Top, Cork, and Camel Hair Pencil, in White Enamel Slide Boxes, price 18/- per gross.

TOOGOOD'S
POISON BOTTLES.

ACCURATE AND STRONG. SEXAGON SHAPE IN DARK BLUE, ACTINIC GREEN, OR FLINT GREEN COLOUR. FLAT SQUARE SHAPE, IN DARK BLUE COLOUR.

AUSTRALIAN AGENCY AND SAMPLE ROOM:

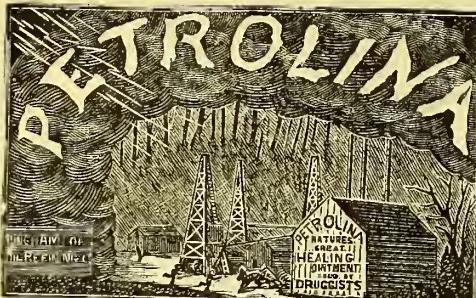
Mr. A. I. JOSEPH, Bridge Street, Sydney.

Telegraphic Address: "TOOGOOD LONDON."

Telephone No. 3834.

William Toogood's Price Current of Glass Bottles, Measures, Earthenware, Druggists' Sundries, &c., will be forwarded post free upon application.

SPECIAL ATTENTION GIVEN TO SHIPPING ORDERS.



Packed in oak kegs, 112 lbs., 56 lbs., and 28 lbs., and also in the Patent "Self Opening" tins of 14 lbs., 5 lbs., and 1 lb. The acme of convenience.

*Do not be satisfied with an inferior Petroleum Jelly when the
VERY BEST IN THE MARKET IS THE LOWEST
IN PRICE.*

PETROLINA

Is a Pure, Sweet, Non-oxidisable Paraffinum Molle, superior in quality to anything of the sort ever produced.

Prepared in two consistencies, No. 1, 115° to 120° M.P.; No. 0, 95° to 100° M.P.

To be had of all Wholesalers throughout Great Britain.

Agency of the BINGHAMTON OIL REFINING COMPANY, 3 COLEMAN STREET, E.C.

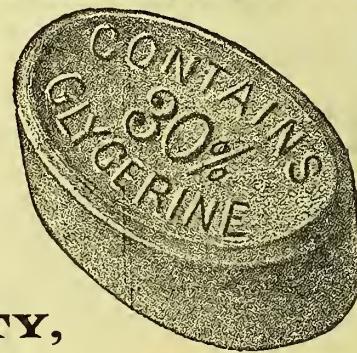
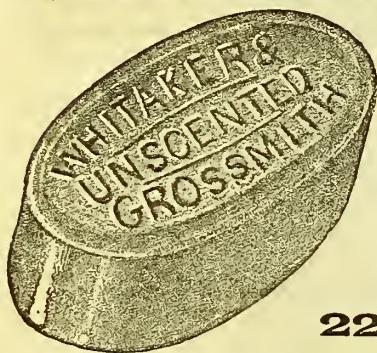
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The acknowledged best Makers of the

REAL OLD ENGLISH TRANSPARENT SOAP,

In Tal lets, Shaving Sticks, and Balls. 25 per cent. cheaper than any other of its kind in the Market.

*Proprietors of the Celebrated
WHITE GLYCERINE SOAP
AND
SANITARY EUCALYPTUS SOAP.*



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BARBER'S ORIGINAL CRIMSON INK FOR MARKING LINEN,

WHICH IS CHANGED BY HEAT TO A JET BLACK.

Put up for Retail Sale in 6d., 1s., 2s., 2s. 6d., and 5s. Bottles.

Also Barber's Concentrated Liquid COCHINEAL, for Colouring Jellies, Custards, &c.

Put up in 6d. and 1s. Bottles.

MANUFACTURED ONLY BY THE PROPRIETORS—

G. BARBER & CO., 6 Worcester Drive, Club Moor, LIVERPOOL

Can be obtained through any of the Wholesale Firms, or from the Proprietors,
G. BARBER & CO., Club Moor, Liverpool.



HOOPER'S MARKING INK

IS THE BEST, BLACKEST, & MOST PERMANENT.



Messrs. THRESHER & GLENNY, Hosiers to H.R.H. the Prince of Wales, say:—"We have used Hooper's Marking Ink for many years, and no Ink gives us such satisfaction or produces so black and permanent an impression."

1s. size, in Wood, 6s. 6d. per doz.; Card Cases, 5s. 6d.; 6d. size, 3s

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Agent for Tasmania: Mr. GOULD, Pharmacist, Hobart.

Depot: W. HOOPER & CO., 24 Russell Street, Covent Garden.

"THE BEST NATURAL APERIENT."

Persistent attempts are made by interested parties to deceive the public by offering Natural Mineral Aperient Waters with marks, names, and designations very similar to those which are used by the APOLLINARIS COMPANY, LIMITED, for the NATURAL MINERAL APERIENT WATERS imported by them.

Under these circumstances the APOLLINARIS COMPANY, LIMITED, feel compelled to caution the public that the HUNGARIAN BITTER WATER sold by the COMPANY always bears the name of the APOLLINARIS COMPANY, LIMITED, on the Label.

Introduced 1855.]

ROBINSON'S CONCENTRATED WATERS.

(Introduced 1855.

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical impurity. They will keep good any length of time in any climate.

Aqua Anethi, Concent., 4/- lb.	Aqua Clinnam, Ver. Concent., 6/- lb.	Aqua Fomicinuli, Concent., 4/- lb.	Aqua Pimenta, Concent., 4/- lb.
" Anisi " 4/- "	" Cassia " 4/- "	" Menth. Pip. " 8/- "	" Rose " 8/- "
" Camphora " 4/- "	" Flor. Sambuci " 8/- "	" Ang. " 6/- "	" Rose Virgin " 10/- "
" Carol " 4/- "	" Flor. Sambuci " 8/- "	" Virg. " 4/- "	
" The above are put up in Bottles of 3/- lb. and upwards, each of which has the Inventor's Protection Label over Cork.			

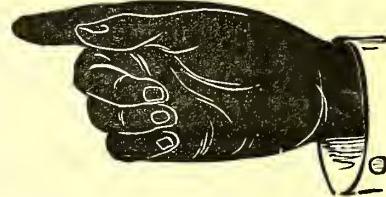
From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Ac. Anethi, Anisi, Cinnam. Ver., Rose, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopoeia. They are excellent in quality, and will be very useful, especially in country practice."

Wholesale Agents: HRAZON & CO., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR.
B ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.

ONCE HAVING SEEN

A sample of SHIRLEY'S A.I. BRAND MENTHOL in Boxwood Cases, with directions printed on the boxes, instead of labels as formerly, you will never buy anything else, as the article looks worth twice the value, and your trade will be doubled by selling it. Order a sample dozen and judge for yourself. The most saleable shapes are 6d. No. 11A, and 1s. No. 14A, price 3s. 6d. and 6s. 3d. per dozen respectively; or, if a large buyer, write for a sample, and it shall be sent free, with full particulars as to prices for a quantity. Buyer's own name can be printed on the cases free of charge if a moderately large order is given.

ARTHUR W. SHIRLEY (late J. G. Shirley), 30 Paternoster Square, LONDON, E.C.



GIBSON'S DELECTABLE JUJUBES, VOICE JUJUBES, & GLYCERINE PASTILLES,

Put up in 4-lb. Decorated Tins with Glass Lids, Tins free, are now being inquired for by buyers from all parts of the world.

They are not surpassed in quality by any maker, and give entire satisfaction.

MEDICATED AND HIGH-CLASS LOZENGES, OF EVERY KIND, sent out in 2-lb. or 4-lb. Bottles, Bottles Free; or in Tins, from 10-lb. upwards. Lime Juice Tablets, Malt Tablets, Acid Drops, and Best Quality Boiled Sugars of every kind

CHLORODYNE JUJUBES AND CHLORODYNE LOZENGES.

PENNY SUGAR WORM CAKES, suitable for either children or adults. Have an immense sale, keep in any climate, and please everybody. Manufactured by ROBERT GIBSON, Carlton Works, Hulme, MANCHESTER, & 1 Australian Avenue, LONDON.

Price Lists sent on application. Our Goods can be bought through any Wholesale or Export House in London.

FOREIGN SPECIALITIES AND MEDICINES.

REVISED PRICE LIST.

ROBERTS & CO.,

FOREIGN AND ENGLISH CHEMISTS, WHOLESALE, IMPORT, AND EXPORT AGENTS FOR FOREIGN MEDICINES AND PATENTS,

76 NEW BOND STREET, LONDON.

Messrs. Roberts & Co. beg to inform the Trade that they are Agents for all the principal French and Foreign Specialities and Medicines, a large supply of which they have always on hand, and can supply on very favourable terms. They are in daily communication with their Paris House, and can offer exceptional facilities for procuring New Medicines, &c., &c., with very little delay.

The following is a list of a few that they name *au hazard*, and that have a large sale:—

Retail	Per doz.	Retail	Per doz.	Retail	Per doz.	Retail	Per doz.
4/- Alcool de Menth. Ricqles	41/5	4/- Capsules Matico	36/-	2/3.. Guyot's Goudron	18/-	7/0.. Rabuteau's Elixir Ferrug.	66/-
2/9.. Ditto ditto	21/8	4/6.. Requin	36/-	11/.. Laville's Gout Tincture	91/10	2/9.. Sirop " 24/4	
2/9.. Aubergier's Syrup	26/3	4/6.. Mathey Caylus	27/-	11/.. " Pills	5/-10	4/0.. Racahout " 31/-	
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6/6.. Bay Rum	57/-	2/9.. Pills	24/4	1/1.. Ditto	7/3	2/9.. Ricord's Injection	24/4
5/6.. Ditto	31/-	4/6.. Clin's Bromide Cam. Dragées	4/-	4/.. Papier Fruncau	24/4	4/6.. " Capsules	36/-
2/.. Belloc's Charcoal	15/4	5/.. Ban Botot (Genuine)	40/1	2/3.. Ditto	14/5	9/.. Syrup 90/- 4/6.. 42/-	
1/9.. Lozenges	14/5	3/.. Ditto	24/4	1/9.. Paté Anberger	15/4	1/6.. Star Paper 11/-	
4/6.. Blancard's Pills	32/5	2/6.. Espic's Cigarettes	13/6	1/9.. " de Berthé	15/4	2/9.. Vallet's Pills 22/6	
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4/.. Bully's Vinegar	32/5	2/3.. Granules Arsen. Acid	13/6	1/6.. " de Nafé	13/6	2/9.. Vichot's Trochisques 21/8	
2/.. Ditto	16/3	2/.. Iron	14/5	1/9.. Regnault	14/5	4/6.. Valentine's Meat Juice 38/-	
4/6.. Candé's (Lait Antéphilique) 39/8	2/8..	2/.. Soda	15/4	7/.. Pierlot's Valerian	59/5	4/6.. Vin de Coca Mariani 39/8	
4/6.. Capsules Bromide Camph. 45/-	2/9.. Grimault's Syrup Lime	23/5	2/9.. Rabuteau's Drégess Ferrug.	24/4			

Special Quotations in large quantities.

MM. Roberts & Cie. ont l'honneur d'informer MM. les Pharmaciens Spécialistes de France et de l'Étranger qu'ils se mettent à leur disposition pour des dépôts qu'ils voudraient établir à Londres. On peut avoir tous renseignements en s'adressant à leur maison de Londres ou à Paris.

SPECIAL AGENTS FOR MARIANI'S ELIXIR, EXTRACT PATE, PILLS, SYRUP AND WINE OF COCA, AND FOR VALENTINE'S MEAT JUICE AND LE GRAND'S ORIZA PERFUMERY.

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[1823.

35

PROCTER'S **LIQUID GLUE** PROCTER'S
A PERFECT CEMENT.
MENDS EVERYTHING:

Wood, Glassware, China, Earthenware, Crockery,
Porcelain, Leather, Coral, Celluloid, Ivory, &c.

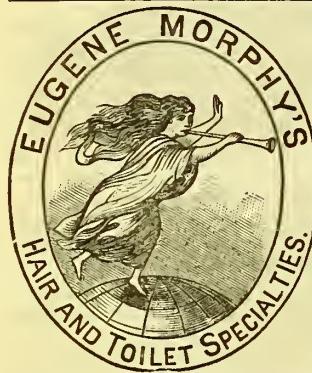
LARGEST BOTTLE. BEST VALUE.

No preparation or heating required. Always ready for use.

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J. H. WINKELMANN & CO., Proprietors,
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SOLE PROPRIETOR—
EUGENE MORPHY, 70 South Audley St., Mayfair, LONDON.

WALNUT POMADE.

A Triumph as a Hair Restorer.
An immediate effect.

Pleasant and Harmless.

Four Colours—Golden, Light Brown,
Dark Brown, and Black.
Pots— $\frac{1}{2}$ oz. (1/6) 12/- per doz.
 $\frac{1}{2}$ oz. (2/6) 20/- per doz.

DEPILATORY POWDER
FOR REMOVING

SUPERFLUOUS HAIR
Speedily and effectually, without
injuring the Skin.

Retail, 1/-; Wholesale, 8/- per doz.
AGENTS:—Barclay; Edwards;
Maw; and Sanger.

PURE
SPIRITS OF WINE

60 o.p., 20/3 per gall.; 56 o.p., 19/9 per gall.

1/- per Gall. Discount for Cash with order.

Further allowance for quantity. STEAM STILLS ONLY

GEORGE PHILLIPS & CO.,

ST. ANDREW'S DISTILLERY, CLERKENWELL RD.
LONDON, E.C.

A YER'S
RECAMIER PREPARATIONS
FOR THE COMPLEXION.

Positively made from a formula used for forty years by Madame Recamier, the noted beauty of her day, and never before manufactured for sale. Used daily, to the exclusion of all other articles of a like nature, by Mesdames Adelina Patti, Sarah Bernhardt, Lillie Langtry, Mrs. James Brown-Potter, and hundreds of others. For terms to the trade, and for sale at retail, apply to

The AMERICAN EXHIBITION, LONDON, Column B, No. 34.

RECAMIER CREAM—A Curative. RECAMIER BALM—A Beautifier.
RECAMIER POWDER—For Ladies and Infants, and Gentlemen after Shaving.

Home Office—39 & 41 Park Place, New York City, U.S.A.

MESSRS. J. ATKINSON & CO.,

of 5 FINSBURY SQUARE, LONDON, Manufacturers of HIGH-CLASS PERFUMERY,

Beg to inform the Trade that they are in no way connected with the firm of Messrs. J. & E. Atkinson, of Old Bond Street, but sell their Goods upon their own merits, viz:—QUALITY AND CHEAPNESS.

Y
BURROUGHS
Best **Cale St.**
Distillery.
Methylated
CHESSEA, S.W.
Spirits
AT LOWEST PRICES.
Also **Best**
Miscible
Naphtha
FINEST WOOD NAPHTHA.
JAMES BURROUGH
LONDON, S.W.

SEDDON'S GELATINOUS OIL

Supersedes all others, and lasts ten times as long as ordinary Oils.

It is the best, most economical, and perfect lubricant ever produced for all kinds of Carriages, Omnibuses, Cars, Cabs, Carts, Rullies, Waggons, and every description of Agricultural Implements, Steam Threshing Machines, Portable and Traction Engines, &c.

It is invaluable as a Healing Ointment, and for Skin Diseases in animals it is the best remedy known.

As a Harness Oil it has no equal, also for softening, preserving, and waterproofing Carriage Tops, Leather Aprons, &c., making them much more durable, and giving them an appearance almost equal to new. MANUFACTURED BY

J. & T. SEDDON, East Sculcoates Oil & Grease Works, OXFORD STREET, HULL.
Special Quotations to Shippers and large Buyers. Agents Wanted.

SILVER MEDAL
I.H.E. 1884.



THE ONLY
MEDAL AWARDED
FOR THIS
SPECIALTY

CHLORIDE OF LIME!
IN AIRTIGHT WATERPROOF TRADE MARK
INVENTORS AND ODOURLESS PACKAGES
MANUFACTURERS **NATIONAL CHEMICAL CO., LONDON**

SILVER MEDAL
I.H.E. 1884.



THE N. C. CO. PACKAGES HAVE STOOD THE TEST FOR MANY YEARS, AND CAN
ALWAYS BE RELIED UPON TO GIVE SATISFACTION.

KEPT IN STOCK BY ALL WHOLESALE DRUGGISTS & C.
SEE THEIR PRICE LISTS.

BEWARE
OF OTHER SO-
CALLED AIRTIGHT
PACKAGES.

ASPINALL'S ENAMEL.

READY FOR USE.

COLOURS EXQUISITE, SURFACE LIKE PORCELAIN.

FOR art furniture, shelves, wicker and basket tables, chairs, hat stands, umbrella stands, milking stools, Venetian blinds, hot-water cans, bird cages, brackets, bedsteads, buckets, &c.

LIST OF COLOURS IN STOCK.

<i>Any Shade, Tint, or Colour made to pattern at one hour's notice.</i>	
Vermilion	Drab
Flamingo Red	French Grey
Dark Red	Olive
Royal Mail Red	Coral (Pink)
Sealing Wax Red	Hedge Sparrow's Green
Black	Egg Tint
Sage Green	Heliotrope
Japanese Green	Smoke
Pea Green	Straw
Blue	Orange
Terra-Cotta	Lilac
Canary	Myrtle Green
Maroon	Indian Yellow
Stone	Light Oak
	Dark Oak
	Quaker Blue
	White
	Ivory
	Turquoise
	Peacock Blue
	Electric Green
	Chocolate
	Bronze
	Fawn
	Pimrose
	Arabian Brown
	Old Gold, &c.

Price in tins, 2s. 6d. and 1s. 3d.; post free, 3s. and 1s. 6d. A reduction made for half-gallons and gallons of Enamel.

A. A. and Co. have succeeded in producing also a special Enamel for baths that will stand boiling water. For years past this has been attempted by many scientific men in the trade, but they have all failed. This is specially recommended, and being ready for use, any lady or gentleman can apply it, and thus save the expense of sending the bath to be stoved. Colours : snow white, eau de Nil, flesh colour, &c. Price 2s. per gallon; can be had in tins, 3s. 6d. and 1s. 9d., post free. All orders for Bath Enamel should be very distinct. Subjoined are a few of numerous testimonials. All originals can be seen at the Enamel Works, Peckham.

Every purchaser of Six tins of ordinary Enamel, not Bath, will receive Seven, which will be sent post free on receipt of P.O. for 9s.

The MARCHIONESS OF SALISBURY says, "The Enamel I ordered from you answers very well."

The COUNTESS OF LOUDOUN says, "I am much pleased with the Enamel paint. It is very satisfactory."

The COUNTESS OF NORBURY says, "I have lately used your snow-white Enamel paint, and have been thoroughly satisfied with my experience of it."

The COUNTESS FEIRERS says, "I have found your Enamel paint excellent for decorating wicker-work and wooden articles. I have recommended it to Lady Burdett."

The VISCOUNTESS CLIFFDEN says, "Your enamel paints are very satisfactory. I shall feel obliged if you will send me . . ."

LADY BROOKE says, "I have much pleasure in testifying to the excellency of your Enamel paints."

LADY M. FORESTER says, "I am happy to say I have found your Enamel paint very satisfactory."

LADY HOWARD OF GLOSSOP says, "I have much pleasure in recommending your Enamel paint, which I have used in all colours, and found durable and effective."

LADY D. NEVILL says, "I have been thoroughly satisfied with your Enamel paint, which I like extremely."

LADY MACGREGOR says, "I have much pleasure in highly recommending your Enamel paints. The colours are beautiful, and a great convenience that this paint dries so quickly."

LADY GRANTHAM says, "I have much pleasure in recommending your bath Enamel, which I have used with great success for several baths."

HON. MRS. EASON WILKINSON says, "My mother, Lady Deedes, is at present abroad, but I myself have used your Enamel paint, and consider it most satisfactory in every respect."

"The thrifty should visit Aspinall's stall, and see a little wicker chair and table painted with Aspinall's Enamel. They are excellent illustrations of its worth in renovating."—*Queen*.

"Send for Mr. Aspinall's lovely paints; there is no need for any one to have an ugly article about them nowadays."—*Lady's Pictorial*.

"Get some of Aspinall's Black Enamel from Hollydale Works, Peckham, or his flamingo red."—*Housewife*.

"The best paint for baths is Aspinall's White Bath Enamel."—*Bazaar*.

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"Use Aspinall's Black Enamel."—*Lady's World*.

PRIZE ESSAY ON ASPINALL'S ENAMEL FOR HOME AND CHARITABLE PURPOSES.

Among the many wondrous things
The muids of folks that trammel,
I sing of homes made fresh and gay
With "Aspinall's Enamel"!

No art's required to lay it on;
The willing hand is able
To renovate, to beautify,
Bath, can, or chair, or table.

Nor do its varied polished shades
The house alone adorn;
The shady nook it lightens up,
Bedecks the velvet lawn.

And if it's welcome to the rich,
Whose homes were bright before,
Think how its brilliant lines will change
The dwellings of the poor.

The infirmary ward, the dull sick-room,
Where pain and sorrow lie,
With pleasant tints may soothe and cheer
The sufferer's weary eye.

Lastly, its price is wisely placed
Within the reach of all;
So rich and poor may join in praise
Of Messrs. Aspinall.

Another of the essays, showing it is a boon to all classes, came from an unknown cottager:—

Aspinall's Enamel, where hast thou been?
Millions have been waiting thee to be seen.
Now that thou wilt this day declare
For baths none other can compare;
Damp walls for years were to be seen,
When done with their art dry and clean;
Hot water using leaves no lime,—
Makes no impression not in time;
For wear it stands before all others;
It should have been bought for our mothers,
For mannal labour it do save;
Thanks for this blessing Almighty gave.

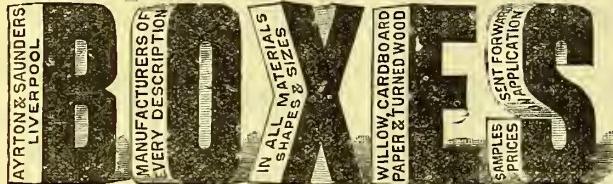
"There is no home in England, however noble or however humble, that cannot be made brighter and more cheerful by the use of this delightful invention. No house-pride lady will be without it, for the shabbiest object can be made into an ornament, an old bracket like carved ivory, a picture frame like polished ebony, and one of our own children can do the work, which is simply a pleasure."—*Vide Daily Press*.

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On shelves and brackets, wicker-work and doors—
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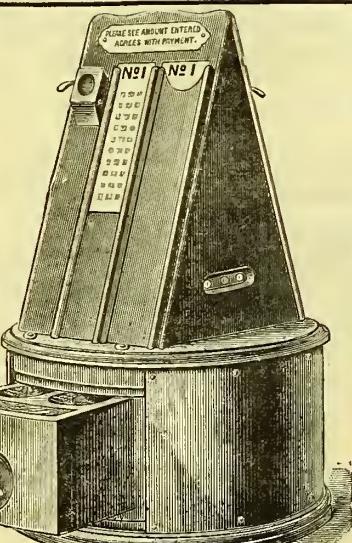
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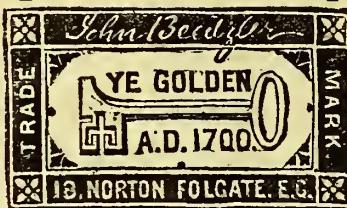
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The SPRUDEL-SALT is officially prepared solely by the Karlsbad Municipal Authority, at their SPRUDEL-SALT WORKS. It is sold only in glass bottles, of two sizes, containing respectively 100 and 200 grammes; every bottle bearing labels with the Trade Mark as well as the Signature C. LÖBEL SCHOTTLÄNDER, KARLSBAD (Austria), without which, and unless so packed, NONE ARE GENUINE. It is prepared and sold in two forms, crystallised and as powder.

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"Cocoa treated thus will, we expect, prove to be one of the most nutritious, digestible, and restorative of drinks."—*British Medical Journal.*

GUARANTEED PURE AND SOLUBLE.

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R. Sumner & Co.,
WHOLESALE & EXPORT DRUGGISTS,
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DRUG GRINDERS,

WAX BLEACHERS,

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MANUFACTURERS OF ALL
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PREPARATIONS.

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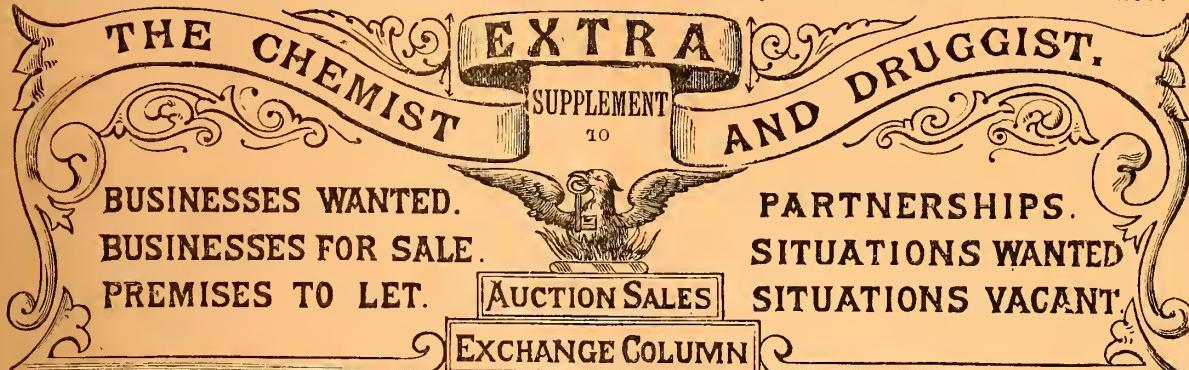
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Alkaline; Cloudy.

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A copy of this Supplement is inserted in every number issued of "THE CHEMIST AND DRUGGIST."



Advertisements for this Supplement must be prepaid, and can be received at the Office, 42 Cannon Street, until 5 p.m. on Thursday afternoon, or by first post on Friday morning of each week.

SATURDAY, JUNE 18, 1887.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C., CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The Business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on Value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain,

Particulars of any of the following will be sent free on application:-

1.—£850.—LONDON, S.W.—Attractive locality; first-class Business for immediate disposal; returns at present about £850; net profits nearly £400; business now being managed by assistant; can be much improved by principal; full particulars on application.

2.—£400.—LONDON, S.E.—Light Retail and Dispensing, with Dental practice attached; business rapidly increasing; returns at present nearly £400; good reasons for disposal; handsome shop and good stock; any reasonable offer will be considered.

3.—£700.—LONDON, W.C. (in a busy locality).—Managed by an assistant; handsomely fitted shop and good stock; returns nearly £700 yearly; price about £600, or offer.

4.—£500.—LONDON, W.—Good-class old-established Business, situated in a good locality; returns at present about £500; profits above the average; convenient house; price about £500.

5.—£1,700.—LIVERPOOL.—Dispensing and Retail Business, situated in a first-rate business locality; returns about £1,700 yearly; net profits nearly 25 per cent.; commodious shop and first-rate stock; about £1,500 required, part by instalments if wished.

6.—£500.—SURREY.—Large town; Prescribing and General Retail; returns £500 yearly; large profits; well-fitted shop and convenient house; price about £500, or reasonable offer.

7.—£1,200.—EASTERN COUNTIES.—Good market town; an old-established Business; returns £1,200; very profitable; good house, &c.; small premium and valuation only required.

8.—£1,500.—SOUTH OF ENGLAND.—Good town; Retail Dispensing, and Prescribing Business of good class; returns, under management, about £1,500; convenient house; rent moderate; every investigation allowed; price about £1,500.

9.—£1,000.—STAFFORDSHIRE.—Good-class Retail and Dispensing; returns (increasing) about £1,000 yearly, with good profits; large and convenient house; partnership introduction can be arranged if wished; price about £750, or an offer will be considered.

10.—£1,000.—NORFOLK.—Large market town; very old-established Mixed Business for immediate transfer; returns about £1,000 yearly; capable of great extension; good house; rent £60; valuation of stock and fixtures only required.

11.—£1,450.—YORKSHIRE.—Good town; Retail and Prescribing Business, with good profits; returns about £1,450 yearly; large shop, well-fitted; value of stock and fixtures only required, about £800.

12.—£500.—SOUTH WALES.—Old-established good-class Business, held by vendor many years; returns over £500; good house; low rental; well-stocked garden; price about £350.

13.—£500.—WEST OF ENGLAND.—Seaport; Branch Business for disposal; returns £500 yearly; very nice shop; valuation required with small premium.

14.—£800.—PROPRIETARY.—Partner required for well-known Proprietary Article; returns at present about £800, capable of being much improved; full particulars, in confidence, on application.

WANTED.

WANTED.—PARTNERSHIPS OR FIRST-CLASS DISPENSING BUSINESSES, EITHER IN LONDON OR GOOD PROVINCIAL TOWNS—PROFITS NOT UNDER £500 YEARLY.—CASH READY.

N.B.—No CHARGE TO PURCHASERS. Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms, where business of a confidential nature requires the especial attention of a London agent.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

TO CHEMISTS.—Good opening; large Corner Shop, Stable or Warehouse with Loft, convenient premises, and side entrance; rent £48. Apply on premises, 8 Seven Sisters Road, corner Sufield Road, Stamford Hill. No chemist near.

PARTNERSHIP.

WANTED, PARTNERSHIP.—A Hamburg Merchant, particularly acquainted with the Drug trade and its most lucrative branches, wishes to enter into negotiations for an international establishment in Drugs, Medical Spirits, Chemicals, &c., which will greatly increase by Hamburg's entering into the Union of German Customs next year. Apply to Bruno Johannsen, 27 Ritterstr., Hamburg.

TENDERS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

THE VESTRY OF THE PARISH OF FULHAM, IN
THE COUNTY OF MIDDLESEX.

TO MANUFACTURERS OF DISINFECTANTS, &c.

THE Vestry of the Parish aforesaid are prepared to receive Tenders for the supply of Disinfectants in such quantities as may be required during the period of nine months from the 24th instant.

Tenders to be made on forms to be obtained at the office of the undersigned, and delivered thereat and endorsed "Tender for Disinfectants" on or before Monday, the 20th instant. No tender will be received unless made on one of such forms.

The Vestry do not bind themselves to accept the lowest or any tender

(By Order) CHAS. J. FOAKES,
Clerk to the Vestry.

Vestry Hall, Walham Green, S.W.
9th June, 1887.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED TO PURCHASE, a genuine Light Retail and Dispensing Business possessing a moderately good house; must bear strict investigation, and require the investment of £700 to £1,000. Principals and executors are invited to send full particulars to "Veritas," care of T. Hunt, Esq., Church Street, Stratford-on-Avon.

WANTED at once, a good Retail, Dispensing, and Prescribing Business in London, E.C., W.C., or W. preferred; particulars as to returns (£700 to £1,000), if cutting or good prices, net profits, and whether managed by principal or manager, other usual particulars. "Chemicus," Sutton & Co., 10 Bow Churchyard, E.C.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

LONDON, S.E. Suburb.—Near Crystal Palace, a Light Retail and Dispensing Business; a good opening for a surgeon; to be disposed of on easy terms. Apply to P. A. Stevens, 72 Mansfield Road, Gospel Oak, N.W.

FOR DISPOSAL, a Light Retail and Dispensing Business in a populous and beautiful suburb a few miles from London; good house; capable of great extension; about £350 required. E. F., care of Rutherford & Son, Solicitors, 32 Gracechurch Street, E.C.

FOR SALE, a Chemist's and Confectionery Business in a thriving locality in Northumberland; only been opened a short time and doing well; no opposition; satisfactory reason for disposal; about £200 required. F., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SOUTH COAST.—For disposal, Light Retail and Dispensing Business, in good position in fashionable rising watering-place, season just commencing; rent £60, with option of 7 or 14 years' lease; house at present let for half the rent; price £450. Address, "Alpha," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AGENUINE Dispensing and Family Retail Business, very pleasantly situated in Canonbury, Islington; been in present proprietor's hands 10 years; returns may be easily doubled by constant personal attendance; a personal interview best. Apply for particulars to T., care of Messrs. Hearon, Squire & Co., 5 Coleman Street, City, E.C.

FOR SALE, cheap, Stock and Fixtures of Branch Shop; first reasonable offer will be accepted. Apply "Postmaster," Pillywenly.

VALUABLE old-established Family, Retail, and Prescribing Business, market town, near Birmingham: returns, juvenile management, £400, year ago proprietor did £850; corner shop, double-fronted, good house, &c.; no opposition; steady man realise fortune soon; price £275. St. Clair, Stevenson, Comley, Birmingham.

CHESHIRE.—In best district of large town; handsomely-fitted and well-stocked Branch; returns £400 under management; could be largely increased by personal attention; low rental; price very moderate, about £350. Apply, in first instance, to "Chemist," 42 Highfield Street, Leicester.

RETAIL and Prescribing Business in S.E. suburb for immediate disposal; shop well fitted and stocked; average weekly cash receipts during last five years £5. 18s. 10d.; five-roomed house; rent £30, lease can be had. Apply, W. E., Messrs. Maw, Son & Thompson, Aldersgate Street, E.C.

£600.—A real Genuine Business; very cheap; returns £1,400 and bound to increase; in centre of main street; value of stock, &c., over £1,200; desirous of leaving the trade to take up appointment early, will take £600 and remainder, £450, spread over 3 years. W., Ismay & Sons, Newcastle-on-Tyne.

OLD-ESTABLISHED Retail, Dispensing, and Prescribing, situated in the very best position of large increasing watering-place, East Coast; returns, chiefly ready money and bearing good profits, approach £600; a pushing man would greatly increase; price £500, or reasonable offer. Letters, "Pharmacy," 78 Durham Road, Manor Park, Essex.

LIVERPOOL.—In one of the best suburbs, Dispensing and Family Retail; returns £800, and increasing; satisfactory reasons for disposal; been in present proprietor's hands 17 years; nearly all dispensing with good profits. H., care of Mr. Hy. Jackson, Druggists' Sundryman, Post-office Place, Liverpool.

NEASTERN COUNTIES.—£75.—Immediately. —A smart little Business, all cash; well stocked, and equal to new; proprietor going into partnership; been neglected; present takings £5 to £6 weekly; opportunity for Prescriber and Dentist; rent £20. "Hydrarg," care of Messrs. Baiss & Co., Jewry Street, London.

WILTSHERE.—Important market town; old-established Retail, Dispensing, and Prescribing Business, with small Wine Agency; returns are £850; net profits £300; price, including two valuable proprietaries, £700. KENT.—Unopposed village trade; same hands 30 years; rent £14; returns £4; neglected; only £100. Messrs. Berdoe, 30 Jewry Street, Aldgate, London, E.C.

FOR DISPOSAL, genuine Light Retail and Prescribing Business, pleasantly situated in an increasing neighbourhood in manufacturing town in Worcestershire; established 8 years; full stock and modern fixtures; returns £650 (large proportion own specialities), realising good profits; price £530; house and premises beautifully fitted up with every convenience; rent £30, on lease, or freehold could be sold; satisfactory reasons given for selling. Apply, "Dentist," Walker, Troke & Co., 82 City Road, London, E.C.

THE British and Colonial Agency (Limited), have a large number of established Chemists' Businesses on their books for disposal; genuine businesses are also wanted; Assistants and Locum Tenens supplied.—1115. Glasgow; Established Business; returns about £800.—1113. Wholesale Druggist's Partnership; London; £500 required, half share.—1111. Retail Business; Kent; price £100.—1103. Partnership; Wales; half share, £650.—1102. Retail; Notts; price £220; and many others. 27 Margaret Street, Cavendish Square, London, W. Prospectus on application.

EMPLOYERS WANTING ASSISTANTS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

INVOICE Clerk wanted, in London; one accustomed to town work. Apply by letter, stating age, last situation, &c., to W. B., care of Mr. Smith, Corn Merchant, Stratford, E.

WANTED, an Assistant in a Wholesale and Retail Drug and Drysalter Business; indoors. Apply, with particulars, B. B. Cowgill, Sowerby Bridge, Yorkshire.

WANTED, a Junior Assistant (indoor); aged 21 or 22 years; hours 8 to 8; salary £30. G. Betts, The Walk, Norwich.

AT ONCE.—An Assistant, about 24, accustomed to good-class business, quick at Dispensing. Apply, giving fullest particulars, height, &c., enclosing carte, J. C. & A. Thresh, Buxton.

AGRICULTURAL CHEMIST wanted in a new Company as Advising Chemist; must invest small sum; good bonus. Address, by letter only, Mr. Fish, 177 Euston Road, N.W.

JUNIOR ASSISTANT wanted for a short time, to put up Stock, &c.; part time for study if required; comfortable home. "Surrey," care of Messrs. Sanger, 489 Oxford Street, London, W.

TO CHEMIST'S ASSISTANTS.—Wanted at once, a Dispenser with Minor qualification; must not be over 30 years of age. Apply personally to the Manager, Drug Department, Civil Service Supply Association, 136 Queen Victoria Street, E.C.

OUTDOOR, to Manage a Branch near Manchester, selling at moderate prices; must be energetic, obliging, steady, and used to good Family, Mixed, and Agricultural trade; preference given to married man having some knowledge of Dentistry. Address, stating age, salary, references, and previous experience, "K 4," *Guardian* Office, Manchester.

WANTED, a Young Man experienced in Pill-making and Sugar-coating of same, and to make himself generally useful; must be sober, steady, and industrious; good wages will be given to a suitable man. Address, with full particulars and references, in confidence, B. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, about middle of July, for a Light Retail and Dispensing Business, in important Yorkshire town, a trustworthy Junior, outdoor; must have unexceptionable reference. State age, height, salary required, and experience, with carte (returned), to "Thea," Barron, Harvey, & Co., Giltspur Street, London, E.C.

ASSISTANTS WANTING SITUATIONS.

1s. for twelve words; 6d. for every six words beyond.

LOCUM TENENS, by Minor; hospital experience; disengaged. A. P. S., 55 Pentonville Road, N.

AS ASSISTANT, in London, with one or two evenings a week for lectures. L., 19 Foregate Street, Stafford.

AS DISPENSER to Surgeon or in good Pharmacy; 7 years' experience. "Medical," care of Mr. Cutts, Chemist, Morecambe.

WHOLESALE; Minor; aged 23; 4 years' experience country Retail, 3 years' London Wholesale. "Quimico," 69 Henslow Road, S.E.

TEMPORARY DUTY taken on moderate terms; good references; 25 years' experience. M. P. S., 50 Bold Street, Moss Side, Manchester.

MR. S. SMITH takes occasional Confidential Charge during absence, illness, or transfer; distance quite immaterial. Address, Berry House, Wiviliscombe, Somerset.

WHOLESALE.—As hand in Wet or Dry Department; aged 21; experienced. J. W., 92 Copenhagen Street, N.

MANAGER or Traveller; Minor qualification; married; 15 years' experience; speciality, prescribing. "Alpha," 20 Park Lane, Norwich.

JUNIOR; over 4 years' experience; knowledge of Dispensing; good references; London preferred. Northwood, 14 Arthur Road, Holloway.

AS MANAGER of a Branch or Dispenser to a Surgeon; 10 years' experience in Town; good references; disengaged. B., 186 Essex Road, N.

AS MANAGER of Branch; Minor qualification; aged 25; 8 years' good experience, home and abroad; highest references. P. Gray, 96 Berkeley Road, Bishopston, Bristol.

LOCUM TENENS, town and country experience, open after Midsummer to short or long July management; highest references; moderate terms. 240/7, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS MANAGER of small select business, with view to succession or otherwise; Lancashire preferred; 12 years' experience. "Chemicus," Beaconsfield Terrace, Bamber Bridge, Preston.

LOCUM TENENS.—A Chemist, aged 33, having disposed of his business, is desirous (before purchasing again) of engagements as above, with gentlemen taking their annual holiday; excellent references; usual terms. "Exe," 8 Higher Eaton Place, Exeter.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading which can be obtained on application.

AGENTS wanted for "Dr. Birley's Anti-Catarrh" and "Baby's Blessing"; exceptionally favourable terms to special agents. Write to-day for particulars to E. Birley & Co., 1 Cecil Street, Strand, London, W.C.

WANTED, by an old-established Cigar House, two or three Agents on Commission, for the sale of Cigars in bond; unexceptionable references indispensable. H. J. Hitchens, Hamburg.

BOXES! BOXES!!—Cheap Light Wood Boxes, suitable for Chemists, Confectioners, &c., for sending all kinds of articles through the post; sample and price-list free 6 stamps. Write for sample, giving size you require, to T. Casbon, Box Maker, Peterboro'.

TRAVELLERS.—A London firm doing business with Chemists in all parts of the country are just about to re-arrange their districts, and will be pleased to hear from Travellers who are open to another commission; liberal terms will be given. Address, A. B. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

DENTISTRY.—Wanted, a few weeks' instruction in mechanical work; anyone having a fair practice kindly send terms per week, either with or without board and lodgings; advertiser is going out to Australia, and is willing to pay a good price to be thoroughly taught. Particulars to W., 27 Western Hill, Durham.

[Too late for classification.]

GENUINE Homœopathic and General Dispensing Chemist's Business for Disposal, in large seaside town, in West of England, splendidly situated and practically unopposed; three months' introduction without charge; stock, fixtures, &c., £750, or by valuation; rent £50. Apply, Box 741, London Central Agency for Advertisements, 402 Strand, London.

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Caesar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. MINOR.—Equations Simplified 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye Kent.

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MANUFACTURER OF

ANALYTICAL, VACUUM, AND BULLION BALANCES.

Wolters' Improved Short-Beamed Analytical Balance,

A SPECIALITY. Assay and other Weights of every Description Made to Order. Balances for Exportation.

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EXCHANGE COLUMN.

Limited to the Advertisement of Surplus Stock, Formulae, Addresses Wanted, and Articles Wanted.

FOR DISPOSAL.**Educational.**

Southall's *Materia Medica* and *Chemical Cabinets*, Whitla's "Materia Medica and Pharmacy," (new); what offers? "Alpha," N. M. Grose, Chemist, Swans. Solly's "Chemical Syllabus," 2s.; Thomson's "Cycloœdia of Chemistry," 1s.; 50 sheets Botanical Diagrams, 2s.; Thouton's "Elements of Botany," splendid work, worth 2 guineas, 5s.; "Inorganic Chemistry," Valentine, 2s.; "Experimental Chemistry," Stockhardt, 2s.; "Chemical Experiments," 1s.; Bingley's "Introduction to Botany," 6d.; Kessinger's "First Book of Botany," 1s.; Bentley's "Botany," 7s.; Thomé's "Structural and Physiological Botany," 3s.; "Lessons in Elementary Chemistry," Roscoe, 1s. 6d.; Watts' "Organic Chemistry," 1s.; Nodd's "Chemical Analysis," 1s.; Wood's "Notes on Metals," 2s.; Wood's "Chemical Notes for the Lecture Room," 2s.; Fresenius's "Qualitative Analysis," 1s. 6d.; Kempshead's "Inorganic Chemistry," 1s.; Judd's "Seven Aids to the Minor"—1. Equations; 2. Medical Latin; 3. Minor Problems; 4. Minor Dispensing; 5. Analysis. Minor, 6. The Minor Questions; 7. Cabalistics enables 100 B.P. Formulae learned rapidly," published at 10s. 6d., 5s. "Minor," 31 Regent Sq., W.C.

Shop Fittings.

Glass Bottles.—Job lines.—About 6 gross each 3-oz. opal and turquoise blue pomades, screw nickel-capped, 18s. per gross; 10 gross 4-oz. ditto, 20s.; 14 gross 2 oz. white duit pomades, screw nickel-capped, 13s.; 4 gross 4-oz. eau de Cologne, 10s.; 20 gross stoppered smelling salts, same shape as Godfrey's, 24s.; 10 gross each 1, 2, and 3-oz. turquoise covered pots, 16s., 20s., and 25s. per gross respectively; all best quality; sample of either kind post free 4 stamps, or of each line 18 stamps. Address, Hearn, 381-3 Kingsland Road, London.

12 ft. range mahogany-fronted drawers, with bevelled glass labels and crystal knobs, 10l.; 12 ft. range polished pine ditto, ditto 8l. 5s.; desk and glass case, mahogany, 50s.; 24 4-lb. best pink shop jars, labelled, 5s. each; 15 dozen best gold-labelled shop-rounds and jars, 9/- 15s.; 6 8-gallon pear-shape carboys on stand, 20s. each; 6 6-gal. ditto, 16s. each; 4 4-gallon ditto, 10s. each; second-hand wall-case, 6ft. 6in., 6l. 10s.; illustrated lists and estimates free. R. Tomlinson & Sons, Medical Fitters, Bond Street, Constitution Hill, Birmingham.

A VALUABLE SPECIAL AGENCY.

DR. BIRLEY'S PREPARATIONS.—Large and Ready Sales.—48 page Pamphlets, gold covers, show cards, &c., free; write to-day for samples. Gordon Murray & Co., 17 Castle Street, Holborn, London. Sole agents for Great Britain and India. "Baby's Blessing" and "Anti-Catarrh" may also be had.

PRELIMINARY AND MINOR.

ALL STUDENTS who are preparing should send **A** for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

DENTISTRY.—Mr. J. W. MARTIN, Manufacturing Dentist to the Profession, 46 Beckenham Road, Penge.—Best material and workmanship guaranteed; terms on application. Instruction given in all branches of surgical and mechanical dentistry; registered gentlemen, who have not had the advantage of a good dental education, are rapidly passed through a full course of instruction, which will enable them to practise dentistry in all its branches, for a fixed and inclusive fee.

Mahogany Second-hand Fittings.—Wall-case, plate-glass, 9ft. 11in. high, 4ft. 6in. wide, 1ft. 3in. deep; 1 ditto, 8ft. 11in. high, 8ft. 9in. wide, 1ft. deep; 1 ditto, 9ft. by 9ft. 3in. pilasters, trusses, ebonized mouldings, sheet glass; cupboard, 7ft. long, 4ft. high; handsome mahogany with glass case; retail counter, 14ft., and dispensing, 5ft. 6in. tops with 34 frieze rail and trusses; dispensing screen, glazed, 5ft. 3in. by 1ft. 9in.; Spanish mahogany counter, thick edge, and trusses, and dispensing screen, glazed, 6ft. 8½in. by 5ft. 9in. Hawke & Son, Wild Court, London.

Drugs and Chemicals.

Surplus Stock.—83 oz. fine Turkey opium, 9s.; 8 oz. original morphine muri., 50s.; 13 15-gr. tubes Johnson's chloride gold, 20s.; 4 oz. argent. nit. cryst., 11s. 4d.; 3 lbs. potass. iodid., 27s.; 2 ½-oz. tins Schering's glycerine (1260); 3 1-oz. original bottles finest oil of neroli big., 12s. oz.; Winchester tinct. opil. P.B.; 1lb. ol. santal flav. ang.; cash offers. "Chemist," 4 Commercial Road, Peckham, S.E.

Formulae.

Send for my list of rec'pes, cheap and reliable. "Chemist" Edwards, Wye.

Extraordinary Offer!—For half-crown Postal Order or stamps, following recipes post free (as sample):—"Herbalad," a concentrated compound botanic extract (like Mason's), for making aromatic herb beer, at 4d. gallon, delicious, appetising, sparkling; "Tie Specific," infallible tincture, acts like magic, quicker than tonga; "Hop Tonic" (instanter), splendid preparation in every respect, costs under 1s. lb.; "Spring Blossom," most lovely and enchanting perfume (resembles Gosnell's), adapted for Jubilee or local name; detailed list free. T. Brooks, Chemist, Louth.

Miscellaneous.

Rubber stamp ink manufacturer's form, splendid six stamps, genuine. Francis, Chemist, Peckham.

Surplus stock.—17 doz. 6d. and 1s. homœopathic preparations; 2½ dozen trusses, right and left, saleable sizes and clean; 1 each 11s. bottle Rooke's elixir and Crosby's elixir; 3 Clarke's B 41 pills; 4 or 5 Martin's indiarubber bandages; 8 canisters Brook's Arabian food; 4 doz. Mrs. Herbert's hair-dressing; 1 pair No. 5 elastic stockings, cotton; 1 only, ditto, silk. Offers to F. E. Bell, 9 Shield Street, Newcastle-on-Tyne.

Perfumers' ambergris, good quality, about 4 oz. what offers? 239/29.

About 1 gross each 4-oz. and 2-oz. packets rotten stone, cheap. Smith, Chemist, Titchfield.

Tricycle, Humber pattern, hall hearings, nickel-plated, 44 in.; little used; race winner; cost eighteen guineas; price 10/-; lamp and bell complete. Cameron, Bedford.

Two 4s. Bullock's acid glycerine pepine for 5s.; eight small Sweeting's toothache elixir for 5s.; about 8/- worth (retail) Bennett's spectacles, varying from 1s. to 4s., for 3/- or offers. 240/4.

About half-ton Myers's royal cattle spice at less than half cost price, or open to an offer for the lot; will exchange for patents or drugs or anything useful. P. A. Stevens, 72 Mansfield Road, N.W.

WANTED.

3 doz. 30-oz. shop rounds. 33 Great Western Street, Wednesbury.

To purchase a range of mahogany drawers, 12 ft. long. H. Lunn, Hornastle.

Surplus patents, drugs, &c.; lowest cash prices. "Chemists," 10 Bow Churchyard, E.C.

Second-hand "Art of Dispensing," reprinted from Diary, 1885; terms moderate. 239/39.

Empty Apollinaris or similar bottles wanted. Apply by letter, with price, to Edisbury & Co., North Wales Factory, Wrexham.

Diary containing treatise on cattle; believed to be 1883; full price given. Hopkins, 5 Liverpool Street, E.C.

4 50-gallon circular tinned iron oil-cisterns, with taps; sound condition. Particulars, Cuttle, Scarborough.

An iron mortar, not less than 4 pints; or ginger crusher; no flaws; cash price. Smith, Chemist, Titchfield.

Attfield's "Chemistry," Wootten's "Physics," and Will's "Analysis"; all latest editions. Totte, 3 Elizabeth Place, Cork.

Dental gasometer, with tube and face piece complete, to hold not less than 8 gallons; must be in good working condition and cheap. J. Young, Lower York Street, Wakefield.

Attfield's "Chemistry" and Bentley's "Botany," late edition; state price and condition. Greenhalgh, 17 Old Street, Ashton-under-Lyne.